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AMOS TWITCHELL, M.D.

WITH

AN APPENDIX,

CONTAINING HIS ADDRESSES, ETC.

BY

HENRY I. BOWDITCH, M.D.

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CHAPTER I.

FROM 1781 TO 1797. — UNDER 17 YEARS OF AGE.

Introduction. — Early Ancestry. — Rev. John Wilson. — Father: Early Settler at Dublin. — Library. — Mother: her Influence upon her Son's Destiny. — Birth of Amos Twitchell. — Mountain Scenery of his Native Village. — Homestead. — Early Infancy. — Gentleness of Disposition. — Expertness at Swimming. — Daring Feats. — Love of Reading, of Arithmetic. — Common Schools. — Anecdote. — New Ipswich Academy. — Reputation of the Lad with his Comrades.

Invited by the friends of Dr. Twitchell to prepare a brief memoir of him, I have approached the undertaking with reverence and delight. I have felt grateful that those who loved him, and knew him most intimately, should have chosen me as his biographer; for, while occupied in the study of his life, I have been brought into immediate communication with one of the most exalted members of my profession.

Convinced as I am, that, to appreciate justly and portray clearly the lights and shadows of any character, one must, to a greater or less extent, live over, in his own individual consciousness, the life of him

whom he would delineate; and that the more the writer loses himself in his subject, the more perfectly he will succeed, — I have, throughout the following pages, endeavored to display Dr. Twitchell's life and character exactly as they were, uninfluenced, if that be possible, by any bias of my own. It ill becomes me to say aught in regard to my own success in this endeavor. I would simply remark, that, if a profound respect for the mind, and a heartfelt love for the amiable traits, of an individual; if, moreover, a sincere desire to be truthful in every minute particular, to the faults as well as to the virtues of a deceased friend and professional brother, are qualities which are useful in such an undertaking, I *know* that I may claim them. My admiration for the original gifts of Dr. Twitchell's mind and heart is unbounded. I regard him as second in surgical acumen to no man I have ever seen, and as perhaps the most *original* mind our profession has produced during the present generation in New England. Yet he had his failings, which I have endeavored to look at dispassionately. I would describe, as I believe him to have been, a noble specimen of humanity; although his life, like that of every other mortal, was not altogether blameless.

The data upon which I shall rest have been obtained from many sources. I have corresponded with all who, in different parts of our country, knew him intimately; I have had personal interviews with some. In the course of the narrative, I shall occasionally introduce extracts from some of his letters, a very few of which remain: in fact, he wrote but few. I

take this occasion to thank my correspondents for the alacrity with which they have endeavored to enable me to form a just estimate of his character. But, for the main features of his mind and disposition, I rely very much upon what I myself learned of them during several interviews it was my good fortune to have with him, subsequently to the summer of 1844, until his death. Never shall I forget those social, happy hours that I spent in his society, listening to the graphic, but most child-like, descriptions of his feats in operative surgery and medical practice. How like a giant he seemed to wield the most adverse circumstances, and make them bend before his power, where even strong men would have been overwhelmed! How inimitable his conversational powers! How infinitely amusing his sallies of good humor, arising from his keen sense of the ridiculous! How withering his scorn of hypocrisy and pretence! How glorious his love of truth!

God grant that what I shall say may be strictly true! I write with the feeling that his disembodied spirit is ever before me; and I have always believed, that in no way could I give greater offence to that great soul than by any unmerited or indiscriminate praise. I fear that a few passages may cause sorrow to some whom I love and respect. If it should be so, I shall deeply regret it; but I know not how I could write otherwise, and be faithful to the complete history of his life.

I can learn but little of the early paternal ancestry of Dr. Twitchell. His grandfather, Capt. Joseph Twitchell, was born Feb. 13, 1719. He lived at

Sherburne, and died March 12, 1793. By his mother's side, he was a lineal descendant of the Rev. John Wilson, a man famed in story, and whom Cotton Mather * styles "the father to the infant colonies of New England." Mr. Wilson arrived from England in 1630. From him descended, in regular succession, as many worthy pastors as there were generations, until the maternal grandfather of Twitchell entered upon life. Forsaking the holy office of his ancestors, he assumed the equally sacred one of medicine. In the eyes of the pious of those days, he was, however, believed to have brought evil upon himself by so doing. He practised medicine at Sherburne, where he died in early life; leaving a widow and an infant daughter, named Alice, the mother of Dr. Twitchell; so that, through her, the destined autocrat in surgery in New Hampshire received the united mantles of New England theology and physic. Of theology he adopted all that is contained in the resolution made, two hundred and thirty years ago, by his great progenitor, viz.: "to be content, if the Lord would grant him liberty of conscience and purity of worship." Over the domains of physic he was destined to shed new lustre, by his admirable intellect and sound common sense.

Samuel Twitchell, father of Dr. Twitchell, was born at Sherburne, Massachusetts, in 1740. He became one of the earliest of the settlers at Dublin, New Hampshire, where he died, April 16, 1820, after his son had risen to fame. When he went

* Magnalia, chap. iii. book iii. Wilsonia.

thither, there were only twelve families in the place. I learn from one who knew him intimately, that he was a man of an active mind, though of the limited education of that period. He was, however, fond of reading and of conversing with men of superior attainments, and, of course, was intimate with the neighboring clergymen. He was a rigid Calvinist in early life; but he subsequently became a Restorationist, and too liberal in his views of religious matters to meet wholly the approbation of the clergy. He was foremost to interest himself in the subject of establishing town-libraries in that section of the country. In the year 1793, one was founded in Dublin; and Mr. Twitchell, at that time a member of the legislature, procured for it a charter. His name is second on the list of applicants for the charter. He presided at the first meeting under the act of the legislature, and afterwards became one of the committee for the choice of books. He was fond of the society of the young, particularly of the more educated class. Hence young teachers and collegians were especial favorites. For a time he had a private governess in his family.

He used frequently to take his son Amos, the subject of this memoir, with his brothers to town-meetings; thus early training them to their duties of citizenship. In those days, intemperance held its full sway, and no election took place without an entertainment to the voters being given by the candidates. This custom Mr. T. strongly opposed, as being inconsistent with genuine liberty and morality. From his lips occasionally fell maxims, which were not

lost by his young hearers. Alluding to a person who would buy a vote, he remarked, "A man who will buy a vote will likewise sell one." "Better suffer wrong than do wrong," &c.

He was much beloved by his fellow-townsmen. It has been said that he had not an enemy. He was at one time a magistrate, and, during the revolutionary war, was commander of a company of minute-men. In addition to all, and probably, it may be said, before all these occupations I have named, he was a substantial farmer and miller. But he was poor, and would therefore have been well satisfied if his son could have been willing to settle down on his own paternal acres, and follow the honorable calling of tiller of the soil, with an occasional superintendence of the mill. In fact, it was not until dire experience had proved that it would be profitless to try to make an *alter ego* of his son, that he freely gave him scope to pursue the natural tendencies of his own genius. Dr. Twitchell, though he esteemed his father, rarely spoke of him with that high reverence and regard which he evinced when he alluded to his mother.

This most excellent woman was the daughter, as we have already stated, of Dr. Wilson, of Sherburne. She was married to Mr. Twitchell, Feb. 9, 1766. They had nine children, and Amos was the seventh. She was a strong-minded woman, of very domestic habits, and of a kind and affectionate disposition. Admirable in her social qualities, she was a thoughtful neighbor and a practical Christian. She has been famed for her qualities as a nurse to her sick friends,

although entirely free from any "old woman's quackery." * Fond as she was of reading, her domestic avocations prevented her from enjoying that relaxation, except when her husband or some of her children were able to read aloud to her. This Amos was wont to do, from his earliest years. She seems to have fully appreciated the fine qualities of her son, and to have determined, though struggling with poverty and surrounded by a numerous family, each one of whom claimed and received her maternal care, he nevertheless should have the best education that could be obtained. Dr. Twitchell used to say, that to her energy he owed his college-course; for his mother never swerved from the determination she made, that, whatever else might happen, *he* should receive a college-education.

As an evidence of the untiring energy of this worthy mother, he was wont playfully to say, that, when he entered college, his coat had been almost wholly renewed by her earnest and efficient needlework. This little incident, homely though it may be in the eyes of some, speaks volumes to me in her behalf.

In her religious opinions, Mrs. Twitchell was orthodox; but evidently she thought for herself, and her tendencies were to liberal views of Christianity. On one occasion she did not allow her children to go

* In fact, there being no physician near, she was consulted on all occasions of sickness in the village, and, not unfrequently, was called from domestic pursuits to go to see distant friends, to whom her practical common sense was often of inestimable value, in a medical point of view.

to sabbath school; and, upon being questioned on the subject by Father Sprague, the clergyman of the village, she replied that she did not allow her children to study the Westminster Catechism, which contained many things that she did not believe in. In the future course of this history, I think we shall be able to trace the impress of parental influence in some of the peculiar traits of character evinced by Dr. Twitchell.

Amos Twitchell was born April 14, 1781. Dublin, his native town, is beautifully situated among the hills, in the southern part of New Hampshire. Its ancient church, built by its earliest settlers, still crowns the summit which divides the fertile valley of the Connecticut from those of the Coontocook and Merrimack. On a fair Sabbath morning, the villagers, when collected for divine worship, could see afar off, in the west, the Green Mountains, skirting the horizon with their shadowy outlines, while close at hand arose to their view the hoary-headed "Mountain of the Great Spirit."* To the east, the eye could grasp twenty or thirty miles of the valley of the Contoocook, with its pellucid stream rolling onward to swell the waters of the Merrimack.

Resting on a gentle slope, about three miles from the summit we have just spoken of, stood the substantial square-built house of young Twitchell's father. It

* Mr. S. G. Drake, well known for his archæological researches, more especially for his learning upon every subject relative to the Indians, informs me that this is the signification of Monadnock, or Monadnook.

was fairly embosomed in a fertile valley; but from many parts of the extensive farm could the youth have a view similar to that which I have attempted to describe, as plainly visible from the highest spot of the village. It was here, that, when a child, he learned to love the hills, and gained with them that fellow-feeling, which, in after-life, caused them always to exert over him their divinest influences.

On the stream, about thirty rods from the house, stood the small mill owned by his father. The village-school was a mile off. Nothing remains now to mark these places, save the huge willow-trees, which, if tradition says true, were planted by young Twitchell in front of his father's homestead. Instead of the old places have arisen a modern house and a more commodious mill. Nature, however, still retains her loveliness, amidst all the changes wrought by man; and one can see at a glance, that a mountaineer's freedom of thought, and a hill-side species of worship, might naturally have been aroused in the boy's soul, from its earliest years.

Amos was weak and puny at his birth, fragile during infancy; and, as his parents had previously lost several children in early infancy, he was, of course, guarded with every solicitude. From a very early age he was remarkable for the extreme tenderness of his heart. He could not bear to see any animal killed, and was distressed at seeing a cat torturing a mouse. Hence it has been a marvel to some, that he ever was able in after-life to amputate a limb from a human body, apparently with the most perfect coolness. The remark has been made, of course, by

persons unacquainted with the philosophy upon which is grounded the practice of surgery.

As the boy grew up, he became more robust, and delighted in manly exercises. As a swimmer, he was unequalled. His daring exploits in this particular are yet the theme of admiration for all who remember him. One correspondent tells me, that, a little later in life, he not unfrequently went two miles, for the purpose of diving from a bridge thirty feet high, and, a still greater distance, to a mill-pond, where, from a lofty bank, he could dive to the bottom, which was many feet deep.

From one who was a resident in the family, when he was about six years of age, I learn that even at this time he was fond of books. As he grew older, this love of reading augmented, and he especially delighted in history, voyages, and travels. Of the few books he could obtain, the Arabian Nights' Entertainments were, as they have been to so many others before and since, a never-failing resource. Sir Charles Grandison was a great favorite. A certain Dictionary of Arts and Sciences is also remembered as a work which he used to pore over with delight. He early became one of the subscribers to the Dublin Library.

A liking for the study of arithmetic was likewise soon observable. The common schools at that time were, throughout the country, in a very low condition. How much more so must it have been in this newly settled village!*

* How different now, when, if fame says truly, Dublin is a light to the towns around for the excellence of her common

He attended school, about four months in a year, until the age of fourteen, when the following incidents took place, which induced his father no longer to oppose his inclination to go to college.

It was a fair day, towards the middle of the haying season of 1797. All the able-bodied men upon the farm were fully occupied in the field, and young Amos was ordered by his father to superintend the mill. A neighbor arrived with his sack of corn, and left it under the care of the boy. Into the hopper the grain was thrown; the wheels soon began to whirl, and the mill-stones to pour down the meal; but, unfortunately for the worthy father, the boy had procured, a short time before, a book on arithmetic, and soon his mind was in the region of abstraction. How long he continued so, he could not and cared not to tell; but the grist was finished, and still the stones whirled around. Wholly absorbed in his mental operations, Amos neglected every thing else; thus bringing infinite injury to the unfortunate miller's property.

A similar accident soon afterwards occurring, and by which a quantity of flaxseed was spoiled, convinced the father, that, as a matter of *economy*, if for no other reason, it would be far better not to employ

schools! All honor to the two clergymen to whom chiefly this change is due! To Father Sprague we would give praise for his wise philanthropy and practical sagacity, in leaving a fund to the town for the support of *common* schools. And to his Oberlin-like successor is due more than can be expressed; for, by his well-balanced and admirably cultivated mind, his indefatigable, quiet enthusiasm, his catholic spirit and gentle manners, he has led his fellow-townsmen duly to value the privileges spread before them.

his son upon labor unsuited to his disposition. Accordingly, on the morning after this last accident, the little bundle, tied up in the checked handkerchief, long afterwards remembered, was ready for him, and greeted his eyes on first rising. His father was there with it, and cordially bade him God speed to school, as he could not afford to keep him at home any longer.

He immediately entered New Ipswich Academy, then under the care of the Rev. Samuel Worcester, who was afterwards settled over the Congregational Church in Salem, Mass.

It has been my good fortune to meet with two who were his school-mates while at New Ipswich, and have been ever since among his most intimate personal friends. By them I learn, that young Twitchell was of a large, imposing frame, both of body and mind; and that he was universally considered one of the most ingenuous, noble-hearted, and intelligent boys of the school. Of all those who were at that time at school, no one retained as a man so entirely the peculiarities of the boy. Upon the form he was quick and active, rather than a hard student. He saw rapidly through the intricacies of a lesson, especially in mathematics; and, to fill up his leisure time, his wit and love of fun were amply adequate. Abusive, obscene, or profane words rarely, if ever, escaped his lips. He was, in fact, the general favorite of the school, equally respected and beloved by his mates, whether as a jocose, hearty, robust football player, or as a scholar of the first rank.

He remained at New Ipswich about seven or eight months, was subsequently with the Rev. Mr. Palmer, of Townsend, and finally was prepared to enter college.

CHAPTER II.

FROM 1798 TO 1802. — ÆT. 17–21.

Starts for College. — Visits Cambridge. — Rejected. — Anecdote. — Enters Dartmouth. — Dartmouth in 1798. — Professors. — Associates. — Extract of a Letter from Daniel Webster. — Character at College. — Practical Jokes. — Anecdote. — Repartee to President Wheelock. — Swimming. — Anecdote. — Love of Mathematics. — Calculation of Eclipses. — Greek Scholarship. — Graduation. — School-teaching. — Correspondence. — Theory of Sudden Frost. — Greek Manuscript.

The time had now arrived for Mr. Twitchell to enter college. In those days, regular stage-coaches were unknown at Dublin. Mounted on a good country farm-horse, and with his saddle-bags on each side, he and his friend G—— commenced their journey towards Boston, with the intention of entering Harvard University. It was about the middle of the month of August, in 1798.

The youth was just at the golden age of seventeen. Gaily did he pursue his course, and, arriving at our venerable Alma Mater, demanded admission. But her portals were not destined to open at his request. He was refused admittance, on the ground that he had not studied all the books required for admission to Harvard.

Upon hearing the decision in regard to himself,

he jocosely remarked to his chum that was to be, as if nothing had happened, "Oh! it is of very little importance. As I was coming to visit Boston, I thought I would just step out and see Cambridge. I have seen it; and, if I cannot stay here, it is of no consequence whatever; for I'll go elsewhere." Suiting the action to the word, he again mounted his horse, turned his head northward, and, with a cheerful, merry heart, rode on steadily towards Hanover. This institution received him, and thereby gained one of the most remarkable of her many sons; while Harvard lost the opportunity of enrolling upon her list one of the most honest and intellectual men this country has produced.

Dartmouth in 1798! How shall we describe it? Twenty-seven years before, its royal charter had been given at the instance of the earnest and pious Dr. Eleazer Wheelock, who for many years had been laboring, with the zeal of an apostle, for the conversion of the Indian tribes, that at that time still flourished among the woods of northern New Hampshire. Chiefly for the civilization of the red man, and incidentally only to "promote learning among the English," did King George III. grant, in 1769, to William, Earl of Dartmouth, and his associates, the vested rights of trusteeship, which have descended to the present time. In 1771 the first class of *four* persons was graduated; and among them was he who presided with so much sagacity over the college at the time Twitchell entered it, viz. the Rev. John Wheelock, son of the pious founder of the institution.

By the side of Dr. Wheelock, in the government of the college, were the Rev. Drs. Shurtleff and Smith; the latter, Professor of Latin and Greek literature. Nathan Smith also was just commencing his brilliant career, as the founder of the Medical School at Hanover, which now holds so high a rank. This gentleman, as we shall hereafter see, was destined to have great influence in the moulding of young Twitchell's mind.

Among Mr. Twitchell's associates at college, stand recorded some of the most eminent of our land. James Dean, long Professor of Mathematics at Montpelier, was in the junior, Hon. Daniel Webster in the sophomore class, when Twitchell entered. Hon. Henry Hubbard, Drs. Mussey and Shattuck, were graduated in the class after him. With many of these, he retained, during his whole life, a most uninterrupted and generous friendship. Daniel Webster writes to me in reference to Dr. T., under date of July 8, 1850; and, after alluding in the highest terms to his intellectual vigor, he says, "Having always maintained with him relations of personal friendship and kindness, I felt his loss as an affliction to myself."

While at college, he retained the same character that he had gained at school, of open-hearted frankness, and love of fun, which either broke out in practical college-jokes, or expended itself in humorous stories, some of which certainly approached the confines of pure wit. If any prank peculiarly bold had been played, suspicion immediately fell on Twitchell, as having, either directly or indirectly, some knowledge of it. He, however, always escaped from

being brought into real disgrace with the college-government; for his jokes had no character of meanness or malice about them. They were simply the innocent outpourings of an exuberant and boyish nature; and, as youth passed away, they left no stain upon him, for the energy that directed them was turned to higher aims. At times, however, his boldness before the government took almost the aspect of impertinence; and, had it not been for the Hudibrastic absurdity and daring fearlessness of his replies, he might have met with severe rebuke. The following well-known and oft-repeated story has been frequently told to me by his friends; and it was evident that he enjoyed with infinite glee the reminiscence of the scene. A very grave offence had been committed by some one; the dignity of the parietal government of the infant college had been sorely set at defiance; for, at the morning summons to prayers, strange sounds had issued from the belfry. Instead of the musical notes of the college-bell, sounding like the sacred convent-bells of the old world, at early dawn, and summoning every sleeper to matins, arose plaintive sounds, as if the whole contents of a sheep-fold had been suddenly transferred to the top of the college chapel. Significant glances stole about among the students. President Wheelock looked grave. With each swing of the bell, the sounds of woe arose, more and more earnestly, upon the still morning air, and floated over the neighboring hills. The solemn services of the day were, doubtless, somewhat interfered with; and a conclave of the faculty was held to bestow condign punishment upon the

offender, who had been so daring as absolutely to drag up into that narrow and lofty spot a "patriarch of the flock" of sheep, belonging to a neighboring farmer. Twitchell, as usual, was thought to know all about the matter. It does not appear, however, that he was really the author of the scheme. Dr. Wheelock, as tradition informs me, was very keen and lawyer-like in cross-questioning the students; so that he rather prided himself on his ability to discover all offenders against the true honor of Dartmouth. On this occasion, however, he may, like some advocates, have overstepped those bounds which are laid down to govern individuals in their intercourse with other men. I do not mean to say that Dr. Wheelock did any thing improper; but simply, that, in questioning Twitchell, he made some very home, and probably uncalled-for thrusts. Twitchell parried them for some time: at length the president said abruptly, "Well! but, Twitchell, how *do* you suppose that ram got into the belfry? You certainly have some notion about the matter. Give us your opinion, sir."

Those of us who knew Twitchell in after-life can well imagine the twinkle of the eye and the internal chuckle with which he solemnly answered as follows: "Well, sir! as I was passing the chapel this morning, I observed some peculiar marks upon the wall near the lightning rod. Perhaps he climbed up that way!" All this was said, of course, with a becoming gravity of manner, quite in accordance with the circle of grave faces in whose presence he stood. The very boldness, combined with the

grotesqueness of the idea, saved the youth from further questioning, and he was dismissed even with a smile; dignity evidently yielding to the genuine impulse of nature.

Many a year afterwards, Dr. Twitchell related to me the following practical joke, which he played upon his companions. He was, as we stated, a most excellent swimmer, and had accustomed himself to dive and remain for a long while under water. Soon after he entered the college, he went out to bathe with his companions in a neighboring stream. He found that it was thought a great feat to swim across to a certain island; and, as some of them were boasting very much of their great powers in this respect, he determined to humble them, and crack a joke at the expense of all. He delayed until his companions had commenced bathing, and then pretended to ask advice about the process; as to how he should move his limbs, and whether it would be dangerous for one who did not know how to swim, to jump off where the water was several feet deep. He submitted to the jeers of the youths, and finally, contrary to their advice, jumped off into the rushing stream. The moment he arrived below the surface of the water, he turned his head towards the downward current, and went rapidly along beneath the surface. As he arose to breathe, he floated in silence down the stream, unseen by any one. It was about twilight in the evening, and he was soon out of sight of his comrades. He then landed, and concealed himself among the bushes. Here he remained, highly amused at the dismay of his schoolmates,

who, after calling for him in vain, hastily dressed themselves, and prepared to arouse the neighborhood in order to drag the river. When he had sufficiently enjoyed himself at their expense, and just as they were starting in pursuit of their elders, Twitchell called out to them, and quietly asked where they were going, and why they were "making so much fuss"!

But Twitchell was not a joker merely when in college; and, although he was at times a source of vexation to his superiors, he always commanded their respect for his honesty, his pure morality, his strong intellect, and high scholarship. He wasted not his hours, but devoted himself especially to mathematics, and likewise made himself a proficient in the classics. He calculated the elements of the total eclipse of the sun in 1806. With the assistance of a friend, he prepared an almanac. From this friend, I learn that he stood very high as a Greek scholar, and that the Greek Oration, which was assigned to him at Commencement, was considered among the first four parts. It was a common remark among his fellow-students, that his organs of voice seemed peculiarly fitted for the pronunciation of that sonorous language, so that it was a great pleasure to hear him read or speak it.

Dr. Twitchell was graduated in 1802. During the whole period of his pupilage, he had been struggling with poverty. This had made it necessary for him to keep school for support during the winter. Accordingly, he had taken charge of district schools in Rockingham, Marlborough, Dublin, and perhaps

other places. Some of his pupils are still alive; and, from their account, I infer that he combined, in a remarkable degree, a power of government with an unusual degree of familiarity with his pupils. The one, however, never encroached on the other. He had sagacity enough to prevent that catastrophe.

The following extracts from some of his letters will afford a faint idea of the young man and of his pursuits during his college-life. It can, I would premise, be safely said that letter-writing was never his forte.

"Dartmouth College, April 4, 1800.

"Friend ***, — The perusal of your letter led me into an agreeable train of reflections. I hoped for the perusal of another before this time. Wednesday last was the day of our Sophomorial Exhibition, on which I had the honor of pronouncing the Greek Oration, on the account of which I have been unable to write; but, if health permit, I expect I shall have it in my power to write oftener. It is very unhealthy this spring in college. Fevers rage among the students to such a degree that it is very gloomy indeed; .... and now, instead of being decked with the garlands of May, I am clad in the weeds of mourning for a brother classmate.... I sent, by last mail, for the paper which is printed in Keene; and I hope I shall have the pleasure of perusing some of the productions of your fertile genius through that medium..... Yours affectionately, AMOS TWITCHELL.

"Dr. Carter."

The following indicates that he had already selected his profession. As a junior under-graduate,

he is attending with interest upon Dr. Nathan Smith's lectures.

"Dartmouth College, Oct. 28, 1801.

"Respected Friend, — . . . Having had my time, since my arrival, principally taken up with Dr. Smith's lectures, I have had no leisure for writing. . . .

"With regard to a school, I have heard nothing from Esquire Sweetser, so I conclude he does not expect to employ me. I have not yet engaged one; but I have some prospect of one at Westminster, Mass." . . .

Under date of June 14, 1801, he writes thus, after alluding to his delight at receiving a letter from Dr. Carter: —

"We have been favoured with a beautiful season, although on the seventh instant we had a very cold day, attended with a frost the evening succeeding; which perhaps may be accounted for in the following manner: A few days preceding the frost had been very warm, which occasioned a wind to set in from a southerly direction, which brought with it a great quantity of aqueous vapor, which it was probable was raised into the atmosphere in the warm regions surrounding the Mexican Gulf; and after being wafted to the north, through a very high region of the atmosphere, it there became mixed with a great quantity of nitrous particles, which were floating in the atmosphere from the cold regions of the north. Upon the conjunction of the aqueous vapor with these nitrous particles, it became immediately condensed, and descended in rain. By these means, the atmosphere being freed from vapor, and a great quantity of those nitrous particles being brought by the rain nigh to earth, occasioned a coldness in the circumambient air, which produced the

frost. This is the method in which I account for these sudden transitions from heat to cold. If you have any better theory for explaining such phenomena, I should be very happy if you would communicate it to me." [He alludes to illness still among the students, and concludes thus:] "I am now attending Dr. Smith's lectures upon *Materia Medica*, which I find agreeable and instructive."

He writes from Rockingham: —

"Feb. 2, 1802.

. . . "I opened my school on the succeeding day, and found it to consist of about eighty or ninety large ignorant scholars." . . .

"April 2, 1802.

"Friend Carter, — This day completes twenty-one solar revolutions since my egress into the world. But twenty-one years, when they are gone, do appear as short as one. However fast time has fled heretofore with me, it now drags heavily along. I can say, as the divines express it in their prayers, 'I have wearisome days and nights appointed to me.'"

He then describes an attack of measles, from the effects of which he was a long time in recovering. He terminates by hoping that bad health will not prevent him from attending Dr. Smith's lectures, which were about to commence. He likewise constantly alludes to this gentleman, in terms of respect, as his medical attendant.

"May 5, 1802.

. . . "I have now been unable to study any for about six weeks; but I can't help myself, the president says, and I must be resigned, for Providence never hurts anybody."

It would appear from the following, that democracy was not in the ascendant at Hanover, in June 30th, 1802: —

. . . "The anniversary of our Independence will be celebrated in this place on Monday next, when an oration is expected by Thomas A. Merrill, A.B. preceptor of the academy in this town, — *a true federalist.* Great were the exertions of the democrats to prevent the triumphs of federalism on this occasion; but, with all their exertion, they obtained but fourteen votes."

His last letter from Dartmouth is dated just before the Commencement-day at which he was graduated, viz. August, 1802. In it he urges his friend Carter to come to Hanover.

A very neatly written Greek manuscript was found among his papers after his death. I presume it was the Oration delivered at the time of his graduation. I do not suppose that it is written in the purest Attic idiom. It doubtless shows something of its origin in the backwoods of New Hampshire. A translation of it, in his own handwriting, has likewise been found; and as it illustrates, in some degree, his views of nature and of God, I have thought it worth preservation. (Appendix A.)

CHAPTER III.

FROM 1802 TO 1805. —— ÆT. 21—24.

Early Tendency to the Study of Medicine. — Anxieties on leaving College. — Dr. Nathan Smith, Preceptor. — Sketch of Dr. Smith's Life. — Preliminary Education necessary to the Medical Student. — Influence of Dr. Smith on Mr. Twitchell. — Practical Anatomy. — Obstructions to the Study of it. — Dissections in Early Times. — Sir Astley Cooper on Resurrectionizing in England. — Dissections in America. — Difficulties of the Physician. — Necessary for him to brave Public Opinion. — Mr. Twitchell as a Practical Anatomist. — Dissections should be legalized in New Hampshire. — Correspondence. — Lecturer on Anatomy. — Removal to Norwich. — Mr. Twitchell invited to deliver a Medical Dissertation at Dartmouth College.

From early childhood, Mr. Twitchell's thoughts had been led to the profession of medicine. During his college course, his intimacy with Dr. Nathan Smith had tended still further to guide him onward in the same path. It was therefore a matter of very little difficulty for him to determine, when leaving college, which of the three professions was most adapted to his nature. He hesitated not a moment, and embraced that of medicine. But how cheerless was the prospect before him!

Poor, without rich friends or father to assist him, the task of gaining an honorable fame and com-

petency seemed too great.* In consequence of this thought, he was seized with one of those fits of abstraction and despondency, which subsequently, for nearly forty years, at times almost wrecked his mind. On the occasion of his leaving college, he was observed to be very sad. Once he stood, wholly lost in thought, gazing at the open sky, and, on coming to himself again, found that he had taken no note of time; for nearly two hours had passed while he had been thus occupied.

Notwithstanding these occasional attacks of depression, he entered, in 1802, with great zeal, on the pursuit of his profession, under the care of Dr. Nathan Smith. I have already alluded to the remarkable character of this gentleman; but the immense influence he had over Twitchell's mind makes it not inappropriate, that a few words should be devoted to his life. This is in fact absolutely necessary, if we would trace all the great influences that tended to mould the mind of Twitchell.

Nathan Smith † was born Sept. 30, 1762, at Rehoboth, Mass.; but his parents soon migrated to Chester, Vt. He attended the common schools in early life; and, while he was yet in early youth, the great days of the Revolution of 1775 dawned upon this country. At the latter part of that stormy war for

* He certainly possessed, in an eminent degree, what has been quaintly styled "the wholesome stimulus of prospective want."

† I have gleaned all my knowledge of Dr. Smith's life and character from the interesting eulogy, delivered at the time of his death, by his friend and colleague, Jonathan Knight, M.D. See Medical and Surgical Memoirs, by Nathan Smith, edited by his son Nathan R. Smith. Baltimore, 1831.

independence, and while still in his teens, he was drafted into the Vermont militia, to repel the incursion of Indians on the frontiers. Encamped in the wilderness, constantly in peril from the rifle and craft of the savage, he gained a robust, manly form, as well as a strong and bold mind. Exposed thus early to laborious toil, he was, all unawares to himself, preparing for the earnest battle of life that was destined for him.

On his return from the wars, he became teacher of the District School in the vicinity of his residence. Whilst thus engaged, one of those curious events occurred to him, which, the more we study biography, the more commonly do we perceive to happen in the life of every celebrated man.

Sir Christopher Wren's greatest fame can be directly traced to the fire which desolated London in 1666. The whole energies of Clarkson's soul were turned to the main object of his life of fifty subsequent years, by his visit to the London and Liverpool slave-ships, in 1784 and 1785. The Revolution in our country has made the name of Washington so mighty, that it will be, as expressed by Lord Brougham in his splendid metaphor, one of the grand tests of the progress of the human race. Wherever we look, we see these "accidents of fortune," as the skeptic calls them, or "special providences," as the pious soul loves to regard them, always happening *just at the right time*, to bring forward a human being into the path to which his nature leads him. "There is a divinity that shapes our ends, rough hew them as we may;" and who

can tell what impulse first led Nathan Smith to attend an operation upon the human body, performed by Dr. Goodhue, then the most eminent surgeon of that district, subsequently father-in-law of young Twitchell? Smith was twenty-four years of age when this happened; and, although he had paid no attention to medicine or surgery before, the sight aroused all the latent fire within him. He asked Dr. Goodhue to allow him to commence the study of medicine in his office. Most wisely, however, did that sagacious man tell him it could not be allowed. His preliminary education was lamentably deficient. He was therefore ordered to fit himself to enter college, before he could be received by Dr. Goodhue.*

* Dr. Perry, of this city, informs me that he heard from Dr. Goodhue the following account: Young Smith was a teacher of the adjacent District School; and it was rumored, that the important operation of amputation of the thigh was to be performed by Dr. Goodhue. The village was alive upon the subject, and many gathered at the house of the patient, apparently attracted by simple curiosity. When all was prepared, Dr. Goodhue, not having sufficient medical assistance, asked of the assembled company, whether any one would hold the limb that was to be taken off. Immediately, a strange and rather ungainly backwoodsman-looking youth stepped up boldly, and offered his aid. Dr. Goodhue was struck with the apparently intense interest that he took in the proceedings, and with his unflinching steadiness of nerve. Smith even tied the arteries as Goodhue took them up, and did so without tremor. After all was finished, and most of the villagers had left, the youth still remained fixed on the spot, with his hands in his pockets, apparently in deep thought. Suddenly, he exclaimed in Yankee phrase and tone, somewhat as follows: — "Look ye here! I think I should like to study medicine with you. I am the teacher in your District School; and, after my term has finished, I'll begin." Dr. Goodhue scanned him well, and answered, "Stop, young man — not so fast. Let me see

Nothing daunted, however, Smith placed himself under the care of the Rev. Mr. Whiting, of Rockingham, for three years; and three years more he studied medicine under Dr. Goodhue. How does such counsel as this eminent physician gave the young man put to shame the modern doctrines of rapid courses of instruction, and quick *grinding* out of medical students!

Commencing practice, Dr. Smith still felt his imperfect knowledge of his profession. He therefore resigned practice, and came down to Old Harvard, to sit at the feet of the elder Warren and of Waterhouse, under whose instructions he was graduated with distinguished honors. Returning to his own State, he projected alone the formation of the Medical School at Dartmouth. Aided by his friend, Dr. Lyman Spaulding, as Lecturer on Chemistry, he commenced a course of lectures on medicine and surgery; thus embracing, in one grasp, the domains of medicine in its widest sense, and which

what you know." Finding, as stated in the text, that he was deficient in his preliminary education, Dr. Goodhue stated his opinion, and the youth left. Dr. Goodhue never thought of the subject afterwards, until, many months subsequently, an unknown individual appeared suddenly at his house, with his pack on his back, apparently prepared to stay. "Well," cried the stranger, "I have come back to study with you; but you must let me earn my board, for I have spent all my money in fitting, as you told me, for college." An explanation immediately took place; and Dr. Goodhue, perceiving the qualities possessed by his extraordinary companion, generously offered him a home and medical tuition, while the youth on his part was to assist, by performing any manual labor that might arise in the country physician's family.

now occupies the attention of at least seven professors in every well-regulated school. Dissatisfied, however, with any thing short of being as perfect in his art as possible, he again resigned practice, made a voyage to Europe, and spent one year in Great Britain, most of the time under the guidance of the professors of the then far-famed Edinburgh school.

His return was a signal for unexampled success. As a surgeon and a professor of surgery, he stood preëminent. His active, inquisitive mind, his extraordinary memory, his practical skill in the details of life, his moral courage, his unbounded kindness of heart, his purity of thought and deed, — all combined to lead him on to fame. From 1798 to 1813, his career was unbroken at and about Hanover. He then removed to the wider sphere of the Professorship of Surgery at New Haven; and, finally, full of honor, surrounded by those who loved him, and mourned by all, he sunk in peace in the sixty-seventh year of his age.

Undoubtedly, such a man was one to stir the blood of a youth like Twitchell; and equally certain is it, that Dr. Smith must have appreciated all the good qualities of his young friend. It is because I think that Dr. Smith had more effect than any other man or set of men in bringing the pupil up to what he subsequently became, that I have felt it right to dwell so long upon the character of the master.

A former friend and pupil of Smith, and a fellow-student with Twitchell, speaks thus: "Dr. Smith was remarkable for his profound views and for his

great disinterestedness. He would do any thing, and perform any labor, for the sake of humanity and for science. Hence Twitchell was attracted towards him."

We can readily believe, that, with circumstances so nearly allied, and with characters so marked, and yet so similar, these two men would have been united. In Twitchell, Dr. Smith had just what he wanted as a youthful assistant; and in Smith, Twitchell found not merely a high-toned preceptor, permeated with a mild and free philosophy, but one of the most kind and self-sacrificing of friends. Persons now living remember well the entire union of the two; and the pupil seems to have ever acted towards his preceptor in accordance with the noble Hippocratic rule, of entire devotion of himself, not merely to his master in physic, but likewise to that master's family.*

Twitchell was very much occupied, during his pupilage, with the thorough study of anatomy. Almost all the time, he was at the dissecting room. This fact leads to a subject, which, though it may be unpleasant to many, needs some notice. I allude to the connection of these two men in the study of practical anatomy. As an introduction, allow me to allude to some of the difficulties that have attended this study.

* "I will honor as my parents the master who has taught me this art (medicine), and endeavor to minister to all his necessities. I will consider his children as my own brothers, and will teach them my profession, should they express a desire to follow it, without remuneration or written bond." — *Oath of Hippocrates.*

Strange as it may seem, although a thorough knowledge of the human frame is absolutely essential to perfection in the medical profession, and dissections are the *only* groundwork of all true knowledge in our art, the study of practical anatomy has been, until recently, prohibited either by public opinion or by statute law. Consequently, dissections were much neglected in former ages. Some physicians hoped to learn man's organization by examining the bodies of lower animals, — a very absurd and inaccurate mode of studying human anatomy! But the really *great* men of the profession, feeling dissatisfied with this very superficial knowledge, have always braved public opinion, or, in a secret way, have avoided its censure. Dissections have been made by some few in every age.*

In England, till within the present generation, a man convicted of dissecting a human body was liable to be classed with felons; and the highest penalties were inflicted on any one who procured a corpse for that purpose. In consequence of these enactments, a class of desperate men arose in England, who for years carried on a *trade* in dead bodies with the chief surgeons and teachers of anatomy in Great Britain. So daring and successful were they, that Sir Astley Cooper, in a reply to a committee of the House of Commons, said: "The law does not prevent our obtaining the body of any

* The eminent anatomist, Vesalius, three hundred years ago, was cited to appear before the Inquisition, on the ground of *impiety* in dissecting the human body; and it is said, that the power of the Spanish king alone saved him from destruction.

individual, if we think proper; for there is no person, let his situation in life be what it may, whom, if I were disposed to dissect, I could not obtain." * Such was the state of things up to 1832, when the British Parliament took up the subject like reasonable men, and passed a bill legalizing the study of anatomy, and making provision for dissections. Under this law, some of the most serious evils have subsided. †

We now turn to our country, where the same opinions and laws against dissections have likewise existed, until within a very short period, in all the States. And where is the physician of twenty years' standing in his profession, who does not remember the

* Life of Sir Astley Cooper, by Bransby Cooper, 1843, vol. i. 407.

† Hansard (Parliamentary Debates, 1830—33) gives very interesting reports of the discussions which took place before a law could be passed. The Duke of Sussex, Sir Robert Peel, Sir Robert Inglis, Messrs. Warburton, Macaulay, Hume, and O'Connell, bore their parts on the affirmative side of the question. Mr. Hunt, the representative of the ultra-opponents, proposed that no one should ever be allowed to dissect, unless he would sign a paper that he was willing his own body should be used for dissection. Mr. Macaulay, as an illustration of the importance to all, to the rich as well as the poor, that physicians should be experts in anatomy, cites the case of Leopold, Duke of Austria, the conqueror of Richard the Lion-hearted. This great commander was thrown from his horse, and fractured his leg. The physicians said that the limb should be amputated; but none possessed sufficient skill to undertake the task. In despair and agony, the duke seized a hatchet, placed it on his mangled limb, and ordered an attendant to lop off the useless member. It was done; and the duke died of the hemorrhage from the spouting artery! If anatomy were not now studied, would not such cases be of constant occurrence?

revolting scenes in which but too many of us were *forced* to engage, however abhorrent the occupation might have been to our own feelings? We found ourselves engaged in the study of an honorable art, whose object is the relief of suffering humanity. Practical dissections were absolutely essential to a knowledge of this art. No one could ever hope to gain a thorough insight into medicine, no one could ever dare perform any operation upon the living body, unless he had studied the intricate and curious workmanship of the human frame. It was necessary for him *practically* to lay out before his own eye every principal artery, nerve, and vein; otherwise he could not operate with safety upon the quivering fibres of a living brother-mortal! But how was he to obtain the means of pursuing this study? He looked at the law, and it said, A man who is found with a human body in his possession, for the purpose of dissection, shall be considered guilty of felony.* Public opinion gave him no milder answer. Every time he entered the dissecting room, he felt that he

* By a law of Massachusetts, passed March 2, 1815, any one who "dug up" or who "received" any human body for dissecting purposes was liable "to be imprisoned not more than one year," or "to be fined not more than a thousand dollars." This law (while at the same time no legal provision was made for dissections) remained in full force until 1831, when the Legislature of Massachusetts swept the absurd and impracticable document from their statute-book, and thereby, I believe, became the first Legislature of the Anglo-Saxon family that arose above prejudice upon this point, and looked at the necessities of the medical profession face to face. Even the English law came after ours; and, as I am informed, English statesmen were not unwilling to seek wisdom from our younger commonwealth.

shut himself out from much of human sympathy. Nevertheless, love of his profession, necessity, a laudable ambition to become an adept in his art, — all summoned him to break, if necessary, the absurd law, and violate public opinion. It was a dreadful alternative, but what every educated physician, until within the period above alluded to, has been summoned to decide. And, without a single exception, every one, either by his own act, or by that of another, perhaps a fellow-student, has chosen to set at nought the law.

But how much torture of mind — how much real injury to the fine texture of the human soul, has been often produced by this alternative, many can tell.

Upon this subject, I feel that I can speak with the authority of one who has known what it was, in former days, to dissect a human body. How vividly, after a lapse of twenty years, come up now before me visions of hours spent in the dissecting room! Some of them were among the most delightful and ennobling of my life; for I then learned to look upwards in reverential awe, from the mystic harp of the human body, to that higher Power which had fashioned all its varied beauty. Other hours, however, were of a far different character, — not inherent in the nature of the employment, but *forced upon me* by the ignorant prejudices of a so-called enlightened community. Deeds were to be done, either by myself, or by some one else, with my knowledge and full consent, but abhorrent to my inmost nature. The stern figure of an absolute fate seemed to rise,

and tell me that it was useless to resist; for it was the irrevocable decree of society, that dissections should be obtained by those very deeds. Let not any one think that any trivial *idea* merely of a necessity in the case would ever have induced any one to undertake the horrible task. In my early days of professional life, it was, as I have stated, the absolute and fixed fate of every medical student to do this, or be recreant to humanity and his profession. We in Boston were grateful to find one avaricious miscreant to take upon himself the most onerous part of the work; but how country students were obliged to do, may be learned from a letter which I shall hereafter lay before the reader. With them, every one had to bear his share of danger; and, considering the amount of that danger, I wonder that such a race of men, eminent in surgery, ever arose amongst us. While I wonder, I glory in the fact, that, notwithstanding all the fierce attempts of society to dwarf the medical profession in this, its primary elements of growth, there has always been an elastic force within our body, capable of hurling off the pressure which a narrow legislation has constantly attempted to exert upon it. All honor, then, to those bold men who were willing, like Smith and Twitchell, to risk fame for the sake of a thorough knowledge of the profession! For one, I give my most grateful thanks to all those fathers of the profession, who, directly or indirectly, have listened to "a higher law than human statute," whilst that was base and grovelling, and have dissected in the face of human law; and who likewise, by unremit-

ting efforts in Massachusetts, have at length brought us to the point that human dissection can be performed openly and with the sanction of the State.

An undaunted courage, great sagacity and self-possession, inflexible perseverance, and an iron frame, were needed on the part of any one to enable him to be repeatedly successful on such occasions as I have hinted at. Mr. Twitchell, as the assistant of Dr. Smith, then sole Professor of the Medical School at Dartmouth, had these characteristics. This gentleman, like other teachers, needed demonstrations in practical anatomy for the instruction of his class. They were as necessary for the life of his school, as the air we breathe is essential to ourselves. It has been reported to me, that Dr. Smith depended almost wholly, if not entirely, upon his young and ardent friend for the procurement of subjects for dissection. Mr. Twitchell always went alone when engaged in these excursions, because he could not trust any one's courage but his own. For many years he labored thus a great deal for Dr. Smith. He was himself constantly dissecting, and thereby preparing for his future course of honorable reputation as a surgeon. He was often in infinite peril. On one occasion he was arrested; but, by some easy ruling of the law, he escaped. * Tradition has

* Another serious evil of these laws was the tendency to wink at their violation, which was exhibited by the very magistrates themselves. These gentlemen, in advance, as they were, of public opinion, required *strong proof* of a fact before they would commit a man. A most striking example of this I met with during my own pupilage. A fellow-student had been, to my certain knowledge, engaged in raising a body in the vicinity

handed down very many singular adventures, which he met with on these various occasions. They illustrate his peculiar traits of character, — his bold and fearless temper, his indefatigable perseverance, his shrewdness in meeting all the diversities of human nature, and even his love of drollery. I might tell of his long rides, sometimes over a hundred miles in extent, by night and by day, in sunshine and storm, of his various accidents and hair-breadth escapes; but it would be unwise to do more than simply allude to this phase in his life. And, in doing so, I do not put him forward, it will be perceived, as an exception to the general rule. All engaged in the same pursuits, either *per se* or *per alios*. Twitchell, however, was unique in these transactions, as in every thing else; unbounded in his energy, with a mind ever fertile in resources, and a courage that never faltered.

Some may doubt the expediency of even referring to this question ; but truthful dealing with the pupilage and *earlier* professional life of Dr. Twitchell requires me to do so, even if I had no other reasons

of where I now write. I knew it, and the students had consulted about it; but, 11 o'clock at night, news came to us that he had been arrested. His fate seemed certain, and yet he proved an *alibi*. I have thought little of " alibis" ever since. I trust, however, that no one will suppose that I believe any person wilfully perjured himself, or that the judge did wrong. In a question of time, so small as five or ten minutes, an individual might be mistaken ; and, as the defendant obtained evidence of his whereabouts during the evening from others than those who knew his exact plans, a confusion of evidence was produced, which, I think, would have puzzled any lawyer, however astute he might have been.

which I deem amply sufficient. Some of these reasons I will but very briefly mention in concluding the subject.

The surreptitious obtaining of bodies for dissections is not carried on now in New Hampshire or New England. There is not the same necessity that existed at the times I speak of. Neither the public nor the profession would at present allow of any such proceedings. But we give no thanks to the statesmanship of New Hampshire for the great relief, thus afforded to the profession in the Granite State. In fact, were it not that other States are more liberal in their provisions, and other means for the procuring of bodies are partially at least laid open to the profession, New Hampshire would still be doomed to suffer from the same practices as were needed in former days. Such a state of things is unworthy of a free and enlightened commonwealth.

Every opportunity should be afforded for the study of anatomy by the medical profession, in the same way as common grammar-school education is, by *positive* enactments, thrown open to the whole people. The inconsistency of any other course becomes especially manifest, when it is remembered that the statute-book inflicts a severe penalty on any surgeon or physician who is guilty of malpractice. It punishes a man for not doing well what it virtually refuses to aid him in learning. Nay, farther, so far as any legislation now exists upon the subject, New Hampshire really endeavors to restrain the medical student from the thorough study of the profession.*

* In 1834 a law was passed, legalizing the study of anatomy.

But why has there always been this antagonism between the medical profession and the public? Let us look fairly at the question. The right and propriety, nay, the duty, of giving burial to the dead, seems to have ever been one of the strongest sentiments in man. The pathetic appeal of Abraham for the burial-place in the field of Machpelah, where he might inter the body of Sarah his wife, moves us as if it were a tale of yesterday. The equally beauful death-bed request of Jacob, that he might be carried back, and buried with Abraham and Sarah, by the side of Leah, is still read as a most touching natural appeal of a dying old man to a pious son. Of the mighty anathemas of Jeremiah against the Jews of later days, none strike us as more appalling than that in which he proclaims that the fathers and mothers, sons and daughters, shall "die grievous deaths, and shall not be lamented, neither shall they be buried," but shall be as offal on the face of the earth. By the Greeks, it was considered impious for any one to allow even a stranger to remain uninterred; for, according to their mythology, the souls of these unfortunates were obliged to wander for a hundred years, before they could enter the mansions of the blessed. The Romans held similar views in regard to the importance of properly caring for the dead, though with some variation in their rites. And, finally, as we turn to Christendom, and read the grand and solemn

In 1842 that was repealed, when the Revised Statutes were passed! The reason for this omission was, as I hear, that the common law allows of dissections!

burial service which has been used for centuries in the Catholic and English churches, or view the more simple formulas of the various sects of Christians, we feel convinced that the office of paying a last service to those who have left this life has been hallowed by time, and is in accordance with some of the purest instincts of the human heart. If, then, these rites are so sacred in the eyes of all, it is natural that we should resist any proposition which threatens to desecrate them. The idea of dissection must at first suggest this mournful thought.

There is another and a still more influential cause, which makes us shrink from the dissection of a corpse. With the conception of death comes up, by the closest train of associations, the awful idea of that mysterious power which has laid low and cold the living man. Not only do the dead seem mutely to appeal to us to perform for them the last and only act of affectionate respect which remains, before their final return to their native dust; but God himself, working in our own hearts, likewise urges us. It therefore becomes almost impious to approach the dead with even seeming irreverence. To the superficial observer, the thought of dissection carries with it this idea of sacrilege. How dare we touch with our profane hands that which has been so recently a living temple of the eternal God!

With these two objections, I presume, every high-minded physician will fully sympathize. But, at the same time, every man in our profession will feel that there are duties to the *living* that are more sacred than those which we owe to the dead. To relieve

the sufferings of humanity is our object. I would hope, that at times it is among our holiest privileges to be the vicegerents of Heaven in the saving of human life. In order to fulfil this mission in strict accordance with the nobleness of its aim, we *must* dissect the dead. Where is there a community in which human life has not been preserved by modern surgery? And how has modern surgery arisen? Solely by dissections of the dead. If we turn to the domains of pure medicine, we shall find the same ultimate answer. Pathological anatomy is an essential element in every thorough medical education. How shall we learn of disease, save by laying open before our eyes the ravages of that disease, perchance, upon the body of a friend? If, then, dissections are *necessary for the well-being of the living*, shall we neglect them, merely because we fear that the veil of sanctity, which shrouds the form of a beloved one, may be rudely torn asunder, or that the burial rite may be neglected? I think not; first, because dissections are consistent with a due respect for the human body; and, second, because they may not interfere with the burial rite.

I do not believe that, by the act of dissection, any man ever was necessarily taught to disrespect a corpse. I am well aware that this view of the subject is contrary to the commonly received opinions of the day. I allow, moreover, that, to those unacquainted with this process, the medical profession may *seem* to be little influenced by that awe which naturally arises in the unsophisticated mind, while in the august presence of the dead. We physicians

are able, it is true, to draw nigh, and touch without fear the no longer living body. The intimate study of anatomy becomes deeply absorbing to us. But I deny, that by dissecting we necessarily show more disrespect to the noblest of God's works, than the clergyman does to the Bible by his daily opening of the sacred pages.

The volume of natural religion is never so widely opened, as when, with the microscope or the scalpel, we trace evidences of beneficent design in our organization. I have never been able so surely to touch a child's soul with the highest idea of reverence, as when in simple terms I have shown to him the wonderful and various peculiarities of his own frame. But it may be said, that, however much the natural tendencies of dissections may not be inconsistent with true reverence and respect, the real fact is that physicians, as a class, do not honor the bodies of the dead as others do. Upon this point I join issue; and I declare, that, so far as I have seen, no *class* of men have more desire to treat with due regard the relics of brother-mortals than our profession has. I cannot now bring to my mind more than two, or at the utmost three physicians, to whom I would not be willing to give up for dissection my own dead body or that of a friend, with the full conviction that they would treat those remains with deference. And shall this essential means of instruction be refused, or granted with great unwillingness, to our profession, because a few in it may be unworthy of confidence? This surely is not justice.

But it may be urged by some, that, supposing

every respect is paid to the body, the burial rites will be neglected. By the laws of Massachusetts, that is provided for; and so they might be in any State. In alluding, in this manner, as I have done before, to Massachusetts, I do not mean to indicate that the profession has no further rights to claim of this commonwealth. Far from it. We are yet in darkness upon the subject. Glimmerings only of light are seen. For these we desire to be duly thankful. The subject deserves a thorough investigation; and the medical profession, as a whole, will never rise in this country to the rank it ought to hold, until better views are entertained by the public upon this all-important matter. That investigation should be made in another place. I should not have alluded to it in this work, if it had not been somewhat forced upon me by the history I am endeavoring to portray. And feeling sure that these views, which have now been given, would be wholly accepted by Dr. Twitchell, I trust to be excused, if, in pursuing them, I have seemed too prolix. I confess, moreover, that during these remarks I have had in view the future well-being of my profession. I have wished to demonstrate, at least in some slight degree, that the interests of the public and of the medical profession are identical, and that exactly in accordance with the wise liberality of the public toward medical schools will be the class of physicians who shall hereafter practise medicine and surgery in America.

Twitchell remained two years under the immediate care of Dr. Smith. They frequently rode

together to attend to the medical and surgical practice of the latter, which, at that time, was very extensive. Twitchell likewise assisted him in the chemical department of the school. But it is not probable that the preceptor's influence was confined to the mere professional training of Twitchell. Dr. Smith's high-toned morality, his bold, free thought, his spotless purity of life, all must have borne with power on the opening mind of his pupil.

The following letters were written during his pupilage. They serve as an index to Mr. Twitchell's state of mind. I have selected them from a few, now in the hands of Dr. Carter's daughter : —

"Nov. 8, 1803.

"Friend Carter, — In vain do I search the post-office for your promised favors. I find I must first start my quill, with an anticipation of then realizing the friendly effusions of yours. Health with all her blushing train are my attendants, whilst I, with insulated attention, concentrate my exertions to one object, that is, my profession. Nevertheless, I can employ a few solitary moments in contemplating the fruition of pleasures I once had with now absent friends, and assign myself leisure to pour forth the effusions of a grateful heart, in the acknowledgment of their past favors. But when I reflect upon the many obligations *I am* and *shall be* under to you, and consider my incapacity to discharge them, I then find that man *is* and *must* be a dependent being, since he was formed for society; notwithstanding Brother Timothy's arguments to the contrary. Were it not, however, for the anticipation of a time when it will be in my power to repay obligations, and to assume more independence than I now can, life would be irksome. But I will have done

with such uninteresting observations, and attend to more current incidents. I arrived at this place on Saturday evening." . . . [He alludes to Dr. Smith and to two operations he saw him perform]. . . . "During his absence [Dr. Smith's] I have perused Haller's Physiology and Sharp's Surgery. Whilst he was on the plain, I perused chemistry, upon which he was lecturing. He is now beginning upon anatomy, and I am reading Cheselden's. I have ridden with Smith to a number of patients in the neighboring towns, and find his practice and practical observations highly instructive. . . . .

"Dr. David Carter."

"Windsor, Vt., July 1, 1804.

"Respected Friend, — . . . . With regard to my own situation, it is very agreeable. I room with Dr. Smith, and board in a very respectable family a few doors off. The circle of my acquaintance in this town at present is not very large; but, so far as it extends, I find the people very civil and agreeable, which, I believe, is the general character of the inhabitants. Their attention to strangers is worthy of imitation. My acquaintance with the ladies is not very extensive. I was introduced, a few evenings past, to a very handsome, polite, and accomplished young lady; but still she is the . . . . coquette that ever walked the earth; but no more of this.

"I have ridden with Dr. Smith between two and three hundred miles, and have seen a number of operations. . . . I have hitherto kept, and intend to keep, a journal of medical events,* so that I may review Dr. Smith's method of operating in and treatment of different cases, which I shall happen to see." . . .

* Unfortunately, this journal, if ever kept, cannot now be found.

In subsequent letters he speaks much more of his teacher, and gains confidence in his own powers, as he says he shall operate, in certain cases, differently from his great exemplar.

Pecuniary difficulties form a prominent topic in his correspondence with Dr. Carter; and the infinite importance of five or six dollars to the poor youth forms a striking contrast with the comfortable existence he enjoyed in subsequent life. In connection with this subject appears, however, a determination to keep clear of all debts, save to his brother-in-law Dr. Carter, to whom he expresses unbounded gratitude.

Under date of November 4, 1804, I find the following proposition to a physician, which illustrates what I have stated above in regard to dissections. I do not believe that such a plan would be thought of at the present time. I give it as a sad reminiscence of former intolerance and wretched ignorance on the part of the public, which forced honorable young men to conceal the act of dissection.

The extract is as follows: —

"In confidence, and at the request of two or three of my fellow-students, I make the following communication: I, ——, N——, and perhaps B——, being desirous to make dissections for a few weeks, would, if you thought proper, and was willing, come and reside in —— for that purpose. They would procure the subjects at a distance, and out of the circle of your practice. I think it might be carried on in your study, without any probability of detection. They would board at the neighbors', and assign this spurious reason for their coming, viz.

that Smith, going to be absent from home, advised them to come and read, and ride with you till his return. Should you go to New York, they would endeavor to go through with the business before you went. If you should not, they would take time, and make very accurate anatomical investigations."

In 1805 he commenced practice at Norwich, directly opposite Hanover, on the other side of the Connecticut river. He settled there at the request of Dr. Smith. I learn, likewise, that at times he lectured on anatomy and surgery, when the professor was ill. His pecuniary success was not great at this place. He suffered the pangs which every young and poor physician has to undergo; and his fits of despondency were long and severe. He well knew the estimate that had been formed of him; but he saw no evidence of the truth of that estimate, either in his own sad heart, or in the reception he met with from neighbors, although from his letters he appears to have had some warm friends. By others, a disposition was evinced to destroy his reputation, by the accusation of having been engaged in dissections. An anecdote is told of his having said to a person who seemed disposed to accuse him of this as a very grave offence to good morals, "Why, sir, yes; you say truly; I have dissected about a *thousand!*" The listener was so astounded by the statement, that he received it as a jocose denial of the whole matter, and so ever after treated it.

The following extracts from letters to Dr. Carter, written during this period, present points of some interest: —

"Norwich, Vt., May 11, 1805.

"Friend Carter, — As it respects myself, you appear to doubt my existence; but you may tell the fair daughters of Israel to 'weep not, for Amos is still alive.' I have neglected writing hitherto, hoping that my prospects would brighten, and I should be able to give a better account of myself, especially to a *creditor*. . . . I hope you will not be discouraged with a plain narrative of facts. After I left your house, I rode to Windsor, and tarried two days; then, with Dr. Smith, I rode to Hanover, and stayed there till Monday, April 1, when I came to this town with Dr. Smith, who introduced me to some of the most respectable families in the place.

"Here I found four practitioners, Drs. —, —, —, —. These two are as malicious towards me as the d——. I hear but little from the others. . . . . Thus, you see, I shall have slow work in introducing myself into practice. My business, as yet, has paid but about two-thirds of my expenses. I have had two cases of surgery. . . . . Both did remarkably well. . . . So you see prospects begin to brighten a little. The other day I had the satisfaction to be called to advise with Drs. —— and —— in a case of epistaxis. Their conduct was a little ungentlemanlike; but it has turned very much to my advantage, as the spectators very highly approved of my conduct, and condemned theirs. It would be tedious to narrate the whole transaction: however, if I could have a few more such interviews, I should take courage. I have a considerable number of warm friends, who appear very anxious that I should tarry among them, and have endeavored to introduce me into business, all that was in their power; and some of the merchants have gone so far as to offer me any thing I may want out of their stores, and take their

pay in *doctoring*; and, rather than I should leave the town, they would pay for my board one year."

The above shows some of the trials of a young practitioner's life; and it likewise points a moral to the young and old of our profession. No physician ever gained an honorable fame by traducing his neighbor. Yet how many hope to rise by this meanness? By so doing, they injure themselves, lower the standard of medical ethics, and disgust the community in which they reside.

Under date of June 4th, 1805, he writes as follows: —

"Since my last, my business has rather increased; but I still have intervals, in which it is almost impossible to restrain the *hyps*. When I reflect on the paucity of enjoyments and the exuberance of misery in this world, I think life is scarcely worth preserving. Yet, again, ambition will call me from this state of apathy, and arm me with resolution to overcome all opposition. Thus, you see, my friend, my condition appears to be preponderating between hope and despair. At present, hope appears rather to prevail. I am doing business in two or three of the best families in town. . . .

"On Saturday last, you will conclude I was somewhat surprised, upon receiving the following lines from Dr. Smith: 'Sir, — The executive authority of Dartmouth College have appointed you to deliver an oration on some medical subject, on the next anniversary Commencement-day. NATHAN SMITH.'

"My ambition is great; but my diffidence and conscious inability, I believe, will prevent my accepting the appointment. It is true, if I should undertake the performance

and meet with general approbation, it would be a fine thing for me; but, if, on the contrary, I should fail of pleasing, it would . . . . . me. Then, candor would make allowance for adolescence and inexperience. You know me and my situation: therefore be so kind as to give me your advice upon the subject."

"Norwich, Vt., June 19, 1805.

"Friend Carter, — Yours of the 10th instant was duly received, wherein you expressed a decided opinion, that it would be best for me to attempt a medical performance on Commencement-day. I think your remarks upon the subject were just; yet, I believe, you were not exactly acquainted with my situation. You must know, that I shall have to write a dissertation, to be read at my examination, which will be six weeks previous to Commencement; — this will employ my attention until the examination. And, as I am attending to chemical lectures, I shall not have time to write a dissertation which would answer for an oration. Thus, I shall have only the six weeks which intervene between examination and Commencement to write an oration and commit it. Another objection which occurs is the extra expense I must be at for clothes proper to appear upon the stage. And, indeed, sometimes I think I will not take a degree, as it will be uncertain whether I can command cash sufficient; and, at the best, I shall have to involve myself to the amount of what cash I then need.

"My business, since I wrote last, has rather exceeded my expenses; yet that is no object to a person so much in debt as I am. Now, the question is, whether it would be prudent for me to borrow twenty dollars, which I shall expend, if I take the degrees of M.B. and A.M. But, ... it! why am I troubling you with my complaints?

I shall be as well off a thousand years hence as anybody. You say you will attend Commencement, if I pronounce an oration: that need not make any difference with you. I shall be *just* as *happy* to see you if *I do not*, and you will be *much* better *entertained*. Now, I shall depend upon seeing you and Mrs. Carter here at that time. With regard to the oration, I shall think no more about it till I have completed my dissertation; then, perhaps, I may turn my attention that way. In the mean time, do write often. Name some subject that would be proper for a medical oration, if I should conclude to write. From what I have written, you will conclude I am nearly insane, and in fact your conclusions will not be far from accurate; for you know that it is written, 'Dull thinking will make a man crazy.' Yours, AMOS TWITCHELL.

"Dr. David Carter.

"N. B. — I give you many thanks for taking that note I gave brother Timothy; and perhaps it will be well for you to endorse them on it, as you will never get any thing else."

"Norwich, August 7, 1805.

"Friend Carter, — When I wrote by Mr. Cutter, it was in such haste that I omitted mentioning my determination with respect to taking degrees the ensuing Commencement. In your letter of the 10th ultimo, you kindly offer me your pecuniary assistance, if I should need. But I am already so much indebted to you, I dare not accept your offer. A few days previous to my examination, I visited the president, — told him I had almost determined not to take my degrees, on account of the expense. He told me I need not give myself any trouble with respect to his fees; he would wait till I could make it convenient to pay them. Dr. Smith likewise made me

the same offer, upon which I concluded to go forward. So, I believe, I will not be obliged to you for any more cash till my necessity shall be more urgent.

"With respect to my oration, after I completed my dissertation, which was only the day before my examination, I began to turn my attention that way. But I have had so much business since, that I have not progressed far. At present I *have not much* business; but I anticipate some soon. As it is but three weeks to Commencement, it is very uncertain whether I shall be able to complete an oration and commit it.

"I shall put the greatest dependence upon seeing you and Mrs. Carter at Commencement. I have a great many things I want to say to you; and, if a *man* in your situation cannot afford himself the pleasure of such a journey, *I am surely living for nought*. . . . Accept of the fullest assurance of respect and gratitude from your friend and servant, AMOS TWITCHELL.

"Dr. David Carter."

The oration was never delivered; but the young physician took his degrees of A.M. and M.B. in regular academic course, in 1805.

CHAPTER IV.

FROM 1805 TO 1810. — ÆT. 24—29.

Mother's Death. — Correspondence with Dr. Carter. — Prospects. — Despondency. — Anecdote. — Influence of Dr. Smith. — Removal to Marlborough. — Operation of tying Carotid. — History of the Subject. — Views of Contemporary Surgeons, Dupuytren, Roux, Abernethy, Sir Astley Cooper, &c. — Several Minds always work towards one Discovery. — Number of Times the Operation had been performed. — General Results. — Twitchell to be placed in the first ranks of Surgery for this Case.

On November 12, 1805, Dr. Twitchell's excellent mother died. She had been for years suffering with a most painful and malignant disease. He had been anticipating the event, as a moment of release for a dear parent from a life of great torture. He met it with calmness, and, I doubt not, joy. Who would not wish for death to come, if it will bring peace to a loved one who is a hopeless sufferer? Nothing but selfish nature could greet that mysterious power, under such circumstances, otherwise than as the choicest of heavenly blessings. It might have been said, at her death, in the beautiful words of the modern poetess, —

> "And, friends! dear friends! when it shall be
> That this low breath is gone from me,
> And round my bier ye come to weep, —

Let one, most loving of you all,
Say, 'Not a tear must o'er her fall;
He giveth *His* beloved sleep!' "

The following letter refers to the event: —

"Hanover, N.H., Dec. 18, 1805.

"Friend Carter, — Yours of the 13th ultimo was duly received, which gave me the unwelcome, though not unexpected, intelligence of a mother's death. Filial affection bids me sorrow; but philosophical reflection forbids, saying this is only an unavoidable event in the revolution of nature. You well know my ideas with regard to such things: therefore I will not enlarge. . . . .

"I have of late had the happiness to form an acquaintance with Dr. Cowdery, who was a surgeon on board the 'Philadelphia' frigate, when captured by the Tripolitans. He now is visiting his friends in Tunbridge, Vt. I find him to be a very fine gentleman: he appears to be a man of good information, as it respects his profession. I was very much pleased with his company; he repeated many circumstances of his captivity, — the manners, customs, &c. of Tripolitans, some of which you undoubtedly have seen in his journal, which is now publishing in many of the newspapers in the United States. . . . .

"Dr. D. Carter." "Amos Twitchell.

I will here group together extracts from further letters to the same correspondent, as they will afford us a better idea of his actual condition, during his residence at Norwich, than any general description I can give: —

"Norwich, Vt., April 4, 1806.

"Friend Carter, — Yours of the 25th ultimo was gladly received. It gave me pleasure to learn that you were

giving B—— the privilege of a good school; but you did not inform me who her preceptor was. But, sir, it was with regret that I believe you, when you say E. L—— is *dead*. I am sure you do not submit to let death pass unmolested among your neighbors, and seize upon the most promising of your citizens. I like your observations well respecting Dr. Rush: I am informed that he has published a new edition of his works, which undoubtedly are much improved.

"With respect to myself, it is now a year since I came into this town. My business, including my services at the College, has amounted to about 250 dollars, which is trifling; yet, considering the healthiness of the place, and the multitude of physicians, it is doing as well as could be expected . . . .

"Amos Twitchell."

"Norwich, June 1, 1806.

"Friend Carter, — It is a long time since I wrote you, but have had no return. I resume my pen once more. Since I wrote you last, my business has been tolerably good, — in April last I charged upwards of thirty dollars, in May above forty, — and still seems to be increasing. But it still remains a doubt in my mind, whether it is best for me to remain in this place. I am confident I shall obtain the chief of the business, if I do. Yet I believe I might do more elsewhere. My other prospects are about the same as they were when I saw you last. Dr. Smith advises me to tarry. O—— has been endeavoring to persuade me to go with him into York State; he says he will carry out about fifteen hundred dollars, and go into some eligible place and open an apothecary store, and we will share equally in the profits of the store and our practice. You know my hobby, and I should like to

converse with you upon the subject. I have a desire to go to Philadelphia, and, ambition would even say, to Europe. However, I will drop this subject. I believe I shall see you before winter, when I will explain to you fully.

"I have a number of interesting cases I should like to relate to you; but they are lengthy. Of course I must omit them, and will barely mention to you, that, about five weeks since, I operated upon a fistula lachrymalis, which had been of ten years' standing, and succeeded to a charm. Next week, I shall operate upon another. My mode of operating is agreeable to Ware, which differs considerably from Bell. . . . .

"AMOS TWITCHELL."

"Bemis's Room, Hanover, Nov. 26, 1806.

"Friend Carter, — . . . . It has been suggested to me by a number, that they were desirous I should visit your part of the country, and bring my knives. Your study has been named. If it should meet your approbation, I should willingly sacrifice something to the advantage I think you might derive. They would not wish you to take any part in the transaction, neither would they molest any within your circuit.

"That . . . . doctor from Norwich might excite some suspicions in your neighborhood; but he has become so hardened in iniquity, that he will pay no regard to them except on your account. If you think such a procedure would injure you more than the benefit you should derive from it, I think we had best desist. At least, be pleased to express your opinion upon the subject.

"It would not be necessary for me to be with you more than a week or ten days at farthest. . . .

"AMOS TWITCHELL."

"Norwich, Feb. 14, 1807.

"Friend Carter, — I have not heard from you since my remembrance, but still hope you are living. I yesterday received a letter from Mr. William P. Cutter, of Jaffrey, informing me that Dr. Abner Howe has left Jaffrey, and commenced business in Beverly, Mass. He likewise expressed a desire to come and tarry with me till he had completed his study. I should be proud enough of taking a pupil, provided I had a sufficient library of my own, and was sure of continuing in this place any considerable length of time. But, sir, I am not perfectly satisfied with my situation. It is true, my circuit enlarges; yet the emoluments of my practice appear rather too small; and my future prospects are such (provided they should equal my expectation), they would hardly warrant me in spending the prime of my life, before I could attain to any thing like independence. It must be a number of years before I can entirely extricate myself from debt. On the other hand, *a future day* presents many allurements to entice me to persevere. Thus I remain in suspense, doubtful which way to direct my course. I was in hopes of seeing you ere this time, that I might disclose to you my views at large. But I could not do it without much sacrifice. . . . "Amos Twitchell."

"Norwich, April 29, 1807.

"Friend Carter, — Yours of the 17th instant has been duly received; but my present avocations must be my excuse for delaying an answer till some future communication. What I wish now is you would give me your advice in an affair of consequence. Yesterday a friend of mine called upon me, and informed me that he had an affair of honor to settle with a person, who had insulted him in a public manner: consequently, he had invited

him to visit Canada, where they could adjust the affair in safety. He has not had a return as yet; but the probability is, that the invitation will be accepted. My friend told me he should depend on me as his second; but I told him I should utterly refuse him. He then said he would excuse me, provided I would attend him as his surgeon. Now, sir, be so kind as to inform me immediately, whether it would be improper for me to attend him. They are both gentlemen of the first character and standing in society. My friend ranks high as a military character. — Yours, sir, in haste,

"AMOS TWITCHELL."

"P.S. Don't tell the old gentleman, my father, of this. You shall hear from me soon."

"Norwich, May 9, 1807.

"Friend Carter, — . . . With regard to leaving Norwich, I have not as yet had Dr. Smith's advice upon the subject. Not having had an opportunity of conversing with him, I have barely mentioned it to him. But I have pretty much concluded to quit. I have been looking over my books. I find I am doing very poorly: some have run away; others are unable to pay; and not any of them *do* pay. Of course, I shall never be able to make remittances to my creditors, so long as I tarry here. . . .

"AMOS TWITCHELL."

"Norwich, August 16, 1807.

"Friend Carter, — You undoubtedly think it very strange that I do not visit you; but business has been such, I have thought it best to delay the journey as yet. I have, since the reception of the money you sent, charged to the amount of seventy dollars. I think, as Commencement is so nigh at hand, I shall not be down till after it has past. You *then* may calculate to see me.

Your pupils, B—— and L——, have called upon me, and inform me that a young Esculapian has erected his standard in Jaffrey. What he is I do not learn. Perhaps he may render my success doubtful: I can tell better when I see him. When you see him, tell him he may calculate upon my coming to Jaffrey. — After customary compliments, I would in haste subscribe myself, your much obliged and very humble servant,

"Amos Twitchell."

During his residence at Norwich, we perceive by his letters that at times he suffered from great despondency. Once this increased to a very great degree, as the following anecdote, related a few years ago by him to myself, satisfactorily proves. It gives us also a nearer insight to the relations existing between Dr. Smith and Dr. Twitchell, while at the same time it shows, in a clear light, the sagacious good sense of the preceptor, and his willingness to forget himself for the sake of his beloved pupil.

Darkness had been resting over the thoughts of the young physician for many days. He sat alone, brooding over his fate, which, as he thought, was destined to deceive all those who loved him. Even Dr. Smith was mistaken in him. It was impossible to succeed. He had few patients, and still fewer hopes of having any. At length, he confined himself wholly to his chamber, and sternly refused to see even those who called professionally upon him. When urged by those at whose house he resided to send for Dr. Smith, or some other physician, he angrily refused, saying he needed no medical attendant. Finally, however, the alarmed family sent

over to the professor, and informed him of the circumstances, and likewise of Dr. Twitchell's absolute refusal to see any physician, even himself. The next day, at early morning, Smith entered the room of the hypochondriac, and the following pointed dialogue took place between them: —

Twitchell. — What brought you here ?

Smith. — I was making my circuit, and it brought me near to you; and, as I wanted you to make for me some .... (a chemical preparation, of which the name is forgotten), that you used to prepare when a student, I thought I would ask you to go home with me, and make a little, and, at the same time, teach my students the art.

Twitchell. — I *can't* go.

Smith. — But I cannot listen to any refusal. You *must* go. Besides, I mean to show you a very severe case of gun-shot wound, that I met with a few days since.

Twitchell. — I repeat, sir, I cannot go.

"But at the same time," as he told me, "the memory of former kindnesses smote my heart, and immediately I felt that I ought not to refuse. Unwillingly, therefore, I consented, and prepared for the journey. Dr. Smith said nothing; satisfied with having gained the point of removing me from my own apartment. We were soon in the carriage, and my companion was in his liveliest humor. He told me of every thing he was doing, of all his cases, of the private jokes of the neighborhood; and all with the same earnestness as he would have done, had I taken the warmest interest in the tales.

"Arrived at Hanover, I was kept hard at work all day in the laboratory, making chemicals and teaching the students until dark.

"Smith then came home, and thanked me very much for what I had done, and then said, 'It is too late to think of returning now. You will pass the night here.' I protested in vain. 'Besides,' said he, 'there is that patient I told you about: we must get up early to-morrow morning, and go and see him.' Unwillingly, again, I yielded; and the next day, at early dawn, we were in the chaise. I observed the doctor had his gun with him, but presumed that his love of sporting, which he had gained in his youth, was the cause of it. We visited two or three patients, and drove farther and farther away from home. About dinner-time we stopped at a country inn. We took dinner, and, when we had finished, it was proposed to the landlord, that he should put up some turkeys for us to shoot at. The afternoon passed away rather more pleasantly. We spent the whole of it in sporting, and my mind was taken from the fixed and morbid contemplation of my own thoughts. Evening came, and we were still far from home; and the result was another night's sojourn at Dr. Smith's, and another prospect of a ride in the morning. The next day, we started again; and, as we were driving over hill and dale, I remember as vividly as possible how suddenly it flashed upon me, that Smith, my honored master, had been thus devoting two whole days to cure me of a mere mental hallucination. I felt thoroughly ashamed of myself at the idea. The charm was

broken. I knew he had been reading me all the while, and I had been behaving like a fool. We were rapidly driving down hill, and Smith was talking as usual, when I burst into a broad horse-laugh. Smith turned, with his keen, kind glance, and said, 'Well, what's the matter now?' 'I have been thinking,' I replied, 'what a fool you must have thought me. I feel heartily ashamed of myself.' 'I rather think you will be able to go home to-night,' shrewdly replied my friend. From that moment I was a new man; and ever after, if I looked sad, Smith would bring me up to a right frame of mind, by asking whether it would not be well to go to Hanover to make chemicals."

In the latter part of 1807 or first of 1808, Dr. Twitchell removed to Marlborough, the residence of his brother-in-law Dr. Carter, with whom he entered into partnership. It was, moreover, understood at the time that he came for the purpose of devoting himself chiefly to surgery.

About the time of Dr. Twitchell's leaving Norwich, and settling at Marlborough, he performed an operation, which has been justly deemed the crowning glory of his early fame as a surgeon. I allude to his tying of the common carotid artery, — one of the main blood-vessels leading to the brain. As this case has given rise to some discussion, I propose to examine the subject a little in detail. I would premise, that, from experiments made upon the horse and some other of the inferior animals, Dr. Twitchell had become convinced that the main arteries, going to the brain, could be closed without

injury to their life. He had not the same confidence in regard to human beings.

In the month of October, 1807, a young lad, named Taggart, had his jaw shattered by a pistol-shot. All the adjacent parts were severely bruised, and extensive mortifications of them occurred. On the tenth day after the injury, while dressing it, Dr. Twitchell observed that one of the mortified parts lay directly over the carotid. The mother of the lad, an aged woman, was standing near, as the sole attendant; and he remarked to her, "If that spot goes through the coats of the vessel, your son may bleed to death in a very few minutes." In a paper on the subject, afterwards published, he says: —

"I applied the usual dressings, left the room, and was about leaving the house, when some one of the family cried out that he was bleeding. I hastened back to his room, and found him deluged with blood. The dressings were immediately removed, and the blood jetted forcibly, in a large stream, to the distance of three or four feet. With the thumb of my left hand, I instantly compressed the artery against the base of the skull, and thus effectually controlled the hemorrhage. The patient had fainted; and fifteen or twenty minutes had elapsed before he was so much revived that I dared to make any attempt to secure the artery. Then, still keeping the thumb firmly pressed on the orifice, I proceeded to clear the wound from blood; and, having done this, I made an incision, with a scalpel, downward, along the course of the artery, to more than an inch below the point where the external branch was given off; which, as stated above, had been destroyed at the time of the injury. Having but one hand at liberty, I depended upon the

mother of the patient to separate the sides of the wound; which she did, partly with a hook and occasionally with her fingers. At length, partly by careful dissection and partly by using my fingers and the handle of the scalpel, I succeeded in separating the artery from its attachments; and, passing my finger under it, I raised it up sufficiently for my assistant to pass a ligature round it. She tied it with a surgeon's knot, as I directed, at about half an inch below the bifurcation.

"I removed my thumb and sponged away the blood, not doubting that the hemorrhage was effectually controlled. But, to my surprise and disappointment, the blood immediately began to ooze from the rupture in the artery; and in less than ten minutes it flowed with a pulsating jet. I compressed it again with my thumb, and began to despair of saving my patient. What further could I do? It was impossible to apply a ligature above the orifice: compression, then, was the only alternative. How was that to be effected? Should some one sit by the patient, and compress the artery constantly with the fingers till adhesion should take place? Possibly that might have been done; but I resolved to make another attempt first. Raising my thumb, I placed a small piece of dry sponge directly over the orifice in the artery; and, renewing the compression till a little larger piece of sponge could be prepared, I placed that upon the first; and so went on, pressing the gradually enlarged pieces obliquely upwards and backwards against the base of the skull, till I had filled the wound with a firm cone of sponge, the base of which projected two or three inches externally. Then I applied a linen roller in such a manner as to press firmly upon the sponge; passing it, in repeated turns, over the head, face, and neck. I directed that the patient should be placed in bed, with his head moderately raised,

and that he should be kept as quiet as possible; and, as his pulse was very feeble, he having lost at that time between three and four pounds of blood by estimation, he was allowed a little wine and water, and occasionally some broth. We carefully watched him through the night; but no bleeding occurred, and he complained of but little pain."

The patient recovered.*

No one, I think, can read this account without being struck with the decision and masterly surgical power evinced by the operator. And yet he never published any report of the fact, until persuaded to do so, many years afterwards; and he yielded then to the urgency of a friend, who wanted an article for a medical journal.† His nephew, Dr. Bemis of Medford, to whose active kindness in procuring data for this memoir I owe very much, writes as follows: "His unwillingness this case should be published, with others I had drawn up, was partly for the reason, if I remember rightly, that the operation had been in some degree forced upon him in this instance by the circumstances, which left him no option. Besides, before the time of putting his notes in order, he had heard of Mr. Fleming's case;‡ and this increased the unwillingness he had to publish his

* For a full account of this case, see Appendix B.

† New England Quarterly Journal of Medicine and Surgery, vol. i. p. 188.

‡ Let it be remembered, that Dr. Twitchell operated in 1807. Mr. Fleming operated in 1803, but did not publish until 1817. Dr. Bemis arranged Dr. Twitchell's notes in 1837—8, after the operation of tying the carotid had become an every-day occurrence.

own, lest he should seem to claim the credit of originating the operation."

Now, I contend that this operation, *done at that time*, was most admirable; and that, if Dr. Twitchell had chosen then to publish the case, he would have gained, by that single act, a European fame, which his subsequent life never would have belied. In order to prove this, let us pass in review the exact state of medical opinions upon the subject, and the amount of knowledge as to the propriety of tying the carotid, which had descended to us from the earliest ages of surgery.

And first, to classical scholars, as all great surgeons were until the present century, during which classical studies have been undeservedly neglected by medical men, the very signification of the word "carotid" must have suggested ideas of death. It is derived from *καρόω*, *to cause to sleep;* because the earliest professors of our art proclaimed that animals fell into a deep sleep, usually the precursor of death, whenever the great blood-vessels leading to the brain were tied. The opinion was founded more on theory than absolute demonstration. It was, however, a fixed and sacred law of surgery, that, if the artery was tied, the brain would not receive its accustomed stimulus — the blood, and that death would result.

Another opinion had likewise prevailed until the latter part of the last century, viz. that it would be dangerous to the nutrition of *any* part, if the main artery leading to it were tied. *A priori*, this would seem natural; but the genius of John Hunter had

proved, in 1785, that the main artery of the leg could be tied without destroying the nourishment of it; and, by that proof, he brought to light one of the most beautiful of God's laws which can be observed in the animal organization, viz. that usually only a few hours elapse, before the smaller arteries enlarge, and take the place of the main trunk which has been shut up. This great English surgeon first proposed to tie the artery in the thigh, for disease in the ham. This was thought a bold proposal. Now it is universally admitted to be correct, and the operation is successfully done. None, however, suggested operating upon the neck in this way, because of the fear of trouble in the brain, and death. Even as late as 1807, Kendrick* does not mention the tying of the carotid for aneurism.

Roux, the eminent French surgeon, in his "Melanges,"† published in 1809, *i. e.* two years after Twitchell had successfully tied the carotid, does not allude to the possibility of doing so.

Still further, I am informed by an eminent surgeon of this city, that, even as late as 1809, much doubt was felt by surgeons generally, in this country, as to the possibility of tying even the comparatively small artery of the arm. Moreover, Dupuytren, who for a quarter of a century was the chief of French surgery, performed in 1813 (six years after Twitchell's case) the operation of tying the carotid, as Sir Astley had done for aneurism.

* Edinburgh Medical and Physical Dictionary.

† Melanges de Chirurgie et Physiologie, Paris, 1809.

It was done, however, not in the presence of the class, but in private, with a select few, and as a "great operation." These facts show the views of Twitchell's chief cotemporaries on the subject.

As, in every other grand discovery in any branch of learning, no one man reveals the whole; but several minds work, while all tend towards the same end, until finally one proclaims boldly what the others have prophesied merely: so was this idea of tying the carotid gradually emerging from the darkness of preceding centuries of surgery, and was destined to be fully brought out into a bright light by the genius and courage of Sir Astley Cooper. Its history is as follows: Hebenstreit, a German surgeon, seems to have been the first to mention a successful case. The operation was performed on account of a wound in the vessel, produced during the removal of a scirrhous tumor from the neck. The patient lived. As there is probably no edition* of this work in America, we might safely conclude, even if we had no other evidence, that our friend never knew of the fact.

Next came the renowned English surgeon, Abernethy,† who, in 1804, first published a case, almost a fac-simile of that of Dr. Twitchell. A man had been gored by an ox, and the carotid was injured in its branches. Evidently fearing at first to tie the main artery, Mr. Abernethy closed the superficial vessels. Finding the blood still flowed, he felt compelled, as Dr. Twitchell did three years afterwards, to tie the

* German Translation of Benjamin Bell's Surgery.

† Surgical Observations, 1804.

vessel, as a mere chance to prevent immediate death. The patient died, and the brain was affected; so that this case, if Twitchell had known of it, would rather have tended to support the idea above mentioned, viz. that a ligature upon the carotid would disturb the cerebral functions, and cause death. It appears, however, that Dr. Twitchell knew nothing of it.

In 1803, Mr. Fleming, a naval English surgeon, tied the vessel in a man who had attempted suicide. The patient was saved. This case was not published until 1817.*

Contemporaneous with this, November, 1803, was an operation of the same kind, by a surgeon of our own country.† A tumor was removed from the neck by Dr. Cogswell, of Connecticut; and, during the operation, the carotid was necessarily cut and tied. Twenty days after the operation, the patient died from slight hemorrhage. This fact was likewise not published until years had elapsed. So that Dr. Twitchell could not have known of it, save by hearsay; and there is positive evidence, viz. his own assertion, that he knew nothing of it. According to Velpeau,‡ Dubois had prepared to perform the operation in 1804; but the patient suddenly died on the evening previous to the proposed time.

November 1, 1805, Sir Astley Cooper operated for aneurism of the carotid. The patient died, although Sir Astley did not give up the hope that

* Cooper's Surgical Dictionary. Article: Aneurism.

† Lectures Introductory to Medical Course of Instruction at Yale College, by Jonathan Knight. 1838.

‡ Surgery, Mott's edition.

the operation might, under favorable circumstances, be performed. He was nevertheless obliged to wait until the successful and brilliant result of a second operation in 1808 (one year after Dr. Twitchell had operated successfully),* before he could prove the feasibility of tying this vessel with perfect safety to life. He did not publish the result of this case until 1809. †

The foregoing statements, I think, will sustain me in the following propositions: —

1. The general voice of surgery was against any attempt to tie the carotid artery, at the time, October, 1807, that Dr. Twitchell successfully tied that artery.

2. Although some cases had occurred in the hands of a few surgeons, there is evidence that all except one (Abernethy's) could not have been known to Dr. Twitchell in a published form, when he operated on Taggart. Moreover, as Abernethy's case proved fatal, and only confirmed all previous fears on the subject, it would hardly have induced any one to follow the example.

* Sir Astley, in remarking upon this case, says: "In a professional point of view, it was very desirable to ascertain the possibility of saving life in a case that had hitherto proved fatal, viz. aneurism of the carotid; and I could not but feel more than common interest in the fate of a man, who, although he well knew that the trial was new and the risk considerable, never betrayed the smallest signs of apprehension." Wherein consists the "desirableness" in this case? Aneurism of the extremities had been cured by tying arteries. It was a settled point. The question with Sir Astley doubtless was, whether the same operation that had been successful in the leg could be done upon the neck with safety to life.

† Medico-Chirurgical Transactions, vol. i. 1809.

3. We have the positive assertion of Dr. Twitchell, that he was ignorant of the vessel having ever been tied by any one, although, from his own experiments on animals, he had been led to *suspect* that it could be safely closed in men.

Why, then, should he not stand in the same rank with Abernethy and Fleming, so far, at least, as one operation shows the calibre of a man's mind? Certainly he deserves thus much. Led by his native sagacity, his fertility of resources under difficulties, and by his previous experiments, he performed what a man of smaller intellect and less fortitude would have considered as impossible. By that decision and boldness he saved a human life! I would not willingly claim any thing more than properly belongs to him; but really, when I think that he performed the operation, contrary to many of his early medical prejudices, at the risk of his own fame, while unassisted save by "an old woman" (as he told me) "to wax his thread, and holding on with one hand to arrest the hemorrhage from the open spouting artery, while with the other he dissected down, and displayed its trunk," — when I review all these embarrassing circumstances, and see how nobly he arose above them, I feel a most cordial respect for his surgical genius, and regard him as one of the true nobility of our profession. In saying this, I would not detract an iota from the fair fame of either of his contemporaries. There need be no discussion of their relative claims. They were all discoverers, and deserve equal praise. Sir Astley Cooper arose at a fortunate time to proclaim that the carotid artery

could be tied to cure aneurism; but, if he had not done so, it were very easy to prove that some others would have soon done it; for the general principles laid down by John Hunter must, sooner or later, have led surgeons to this result.

Newton was born, it has been said, at a lucky time to discover gravitation. Others were just upon the point of doing the same thing. Leibnitz contends with the geometer for the honor of having discovered the principles of the calculus; and the scientific world grants to each equal honor, because each, by his own unaided efforts, brought out his beautiful result. Leverier and Adams stand side by side in the temple of honorable fame. Why should not the same just rule of estimating a man's true reputation be followed now, and Twitchell's name be put at least by the side of those of Abernethy and Cooper? This is all I claim, — that he should be in the front rank of the hosts of modern surgery. More especially do I claim such rank for him, because this brilliant case was only the harbinger of a series of triumphs of his surgical skill, which extended through a period of over forty years.

I return now to his biography. He had made a contract with his brother, Dr. Carter, to stay with him for a certain period. As that period drew near to its termination, Dr. Twitchell seems to have felt that a larger sphere was needed for his powers. He wished likewise to cultivate his own mind still more, by a further attendance on some medical school.

The following letter is in answer to one written to him by a resident in Rockingham: —

"Marlborough, N.H. Jan. 10, 1809.

"Dear Sir, — Your polite letter of the 14th ult. has been duly received. You mention the loss you have sustained by the death of Dr. Levi Sabin. From what little acquaintance I have had with the man, and with his character as a physician, I conclude your vicinity will sincerely lament his death, and the faculty will feel the loss of a worthy member.

"I feel very sensibly the honor you do me in offering me your patronage, with the assurance of that of the principal inhabitants of Rockingham, provided I will make that my permanent residence. True, sir, I do not consider myself permanently settled in this place. My contract with my brother will expire in one year from the first day of the present month; after which, I have not determined upon any particular residence. I should like Rockingham on many accounts; yet I believe I should not be so well situated there for the practice of surgery as I am now. I should have Dr. Goodhue on one side; and I believe, on the other side, Dr. Badger, of Westminster, is attempting something in that line: how he will succeed I cannot tell. It is very probable that you will be supplied before the termination of my contract; at which time I have it in contemplation to visit some medical school, the better to deserve the patronage of the public. This suggestion, however, I would not wish to have made public.

"Thus, sir, I have given you a brief sketch of my views, from which you will learn that it is not in my power to comply with your request at present."

CHAPTER V.

FROM 1810 TO 1815. — ÆT. 29—34.

Removal to Keene. — Even Tenor of Life. — Practice. — "Spotted Fever." — Independence of Twitchell. — Dislike of Nosologies. — Letter from Dr. Carter. — New Hampshire Medical Society, Member, 1811. — Offices held by him during Life. — President, &c. — Orator. — Engagement to Miss Goodhue. — Correspondence. — Practice. — Assemblies at Keene. — Pupils. — News of Peace. — Rejoicings. — Horseback Rides. — Marriage, 1815. — Character of Mrs. Twitchell. — Influence on her Husband. — Death, 1848. — Effect of her Death on Dr. Twitchell.

In 1810 Dr. Twitchell went to Keene, from which place he never removed, although, as we shall see, he had not a few invitations so to do. There he labored for about forty years, gradually rising to a fame of which any one might have been proud. For years, I may say it without for one moment seeming to underrate any other practitioner, he stood literally at the head of the profession throughout that portion of our country. He was also known, by correspondence on medical cases, to most of the ablest men in all parts of the United States. Nevertheless, the whole of his life flowed onward in a quiet and even tenor, — always active, yet never unduly excited; so that, though we may see the

result in the solid fame which he acquired, it will present in its recital no striking passages.

Slowly and amid many tribulations, as we have already in some measure seen, did his strong mind develop itself. We can but dimly trace its progress, though we may feel it when comparing one epoch with another. I shall speak of his life at Keene under various heads, among which I shall weave whatever of correspondence I can gather.

We have brief records of all his operations performed between 1808–14. This record was made in 1842, according to the dictation of Dr. Twitchell, from his day-book. It is unfortunate that these notes are not taken more in detail; but, meagre as they are, they prove that at that period he must have been well known; for, out of between ninety and a hundred operations, many of them are the most important in surgery.

Within a year or two after he commenced practice in Keene, the "spotted fever," so called, began to appear as an epidemic; and a panic was the result. The country practitioners in general might be divided into two classes; viz. the learned, who were bound hand and foot to their nosologies, and who considered it of infinite importance to name and classify a disease before commencing treatment; and the grossly ignorant, who, though independent of the shackles of classifications, were disposed to treat all cases, which they *supposed* to be spotted fever, in one and the same way. Twitchell's native vigor of mind came gloriously into play on this occasion; and he gained much reputation for his successful

treatment of this alarming complaint. Feeling that the idea of the necessity of classification, in order to a proper treatment, had been carried to an absurd extent, he renounced the doctrine. He would give no name, but would treat symptoms as they arose. If a man were burning with fever, he would prescribe ice; if shivering with cold, he would stimulate until fever came on, and then have recourse again to refrigerants. All this seems very sensible, according to our present medical theories; yet, such is the power of habit, he was considered somewhat singular in his day. His course was, however, in fact the really wise combination of the *heroic* and *expectant* treatments. The following letter, from his witty brother-in-law Dr. Carter, so quietly informs us of the absurdities of the profession, and the alarm created by the appearance of the disease, that I cannot forbear quoting it: —

"Marlborough, —— 28, 1810.

"Friend Twitchell, — After hearing very alarming accounts from the frequency of the spotted fever at Fitzwilliam, I had the curiosity to go down there this morning to learn of Drs. ——, ——, and ——, the symptoms as it appeared with them. I had the good luck to find them all at home. Dr. —— is unwell. Perhaps they would say he is convalescing; therefore I made not much inquiry of him, except as the monster attacked him, and the treatment, &c. Dr. —— has had all the violent cases, — he thinks to the amount of twenty cases; and I think it probable he has been called to twenty patients that have complained of something. But I cannot learn to my satisfaction that there has been a single case in Fitz-

william. They make it appear like a hundred-headed monster, attacking in every form imaginable: therefore they have no other complaints. Dr. —— tells me, that he has not bled, puked, nor purged for three weeks past; but gives from ten to fifteen grains of opium, once in three or four hours, for forty-eight hours; at which time he begins to lessen his doses, and tapers down; and by that time they are safe. Queer complaint indeed!

"You had better go down, and learn how to make all anomalous complaints put on one and the same type, and yield to one and the same treatment: it will save you much thinking in future.

"If they have had a case of it, I have no doubt but I have had several; but I am not so fortunate as to make brandy and opium cure mine, therefore am put to the trouble of thinking a little before I prescribe.

"To be serious, I had rather have the spotted fever in Fitzwilliam than the itch; for I should rather drink brandy freely than roast with brimstone. — Yours,

"D. Carter."

In 1811 Dr. Twitchell was chosen a member of the New Hampshire Medical Society, and from that time until death always felt the liveliest interest in it. He was, as a friend writing to me says, "the idol of the association." In 1815 he was elected one of the censors; subsequently, in 1823, became a counsellor. Each of these offices he held several years. For three years from 1827, he was its president. On some of these occasions he read scientific papers.* In 1833 he was orator. Later he was elected to represent the society in the American

* See Appendix, B, E, H.

Medical Association, and the convention for the revision of the Pharmacopœia. It is interesting to notice, that, although he had probably more business than any other physician in New Hampshire, he almost invariably attended the meetings of each and all of these societies. This doubtless arose in part from his social qualities; but he had higher reasons. His confidence was great, that by these unions we elevate the profession. Wherever man meets with man in friendly interchange of thought, nay, we may say that wherever a human being meets another with a kindly look, even if no words be spoken, by that very contact and that look the two are benefited and elevated in the scale of human existence. None but a misanthrope thinks otherwise. Dr. Twitchell was no hater of his race.

Some time in the early part of 1814 or latter portion of 1813, Dr. Twitchell became interested in the excellent woman who subsequently became his wife. She was the daughter of Dr. Josiah Goodhue, of whom we have already spoken, as the chief surgeon previously to Dr. Smith's appearance at Hanover. As usual, the course of true love did not run with entire smoothness, and Dr. Twitchell's letters evince great anxiety lest clouds may come to overshadow their fair prospects. Occasionally, he lets forth his thoughts in scraps of quoted poetry, which, to those of us who knew him in later days, seem as incongruous with his nature as the idea of a philosopher flirting with a lady's fan. We find allusions to his increasing practice, which prevents the lover from leaving his post, especially in 1814, when the typhus

fever seems to have been very prevalent. Under date of Feb. 28, 1814, he says, "The cries of distress have prevented me from being with you this evening, and are likely to prevent for days to come." He then states that he had been called that day to several cases of fever, and describes the panic which had seized the friends. On another occasion he pleads the same difficulty of constant and perplexing business, as a reason why he cannot write so often as he would like. Dr. Twitchell's letters I do not feel at liberty to quote from very freely. They are models of the quiet, affectionate expression of an honest and unimaginative mind to a woman whom it loves sincerely. Reason is the governing power. Love-rhapsodies are unknown. On the death of her sister, he tries to support her heart by the following: "It is the duty of rational beings not to make themselves miserable at events which are beyond their reach to control, but with a calm resignation to consider that He who governs the universe orders every thing for the good of the whole."

Under date of January 1st, I find as follows: —

"I hope my expectations are governed by reason, always keeping in view the frailty of human nature, and endeavoring as much as possible to smooth the asperities of life by an equanimity of temper. . . . Last Tuesday evening, we had an assembly, or an *assemblage*. I went at half-past eight, and was called away at nine; so you see that my enjoyment or suffering could not be great. . . . I am now called to visit a patient at Jaffrey this evening, the distance of fifteen miles. To prevent being lonesome, I shall carry you with me. I cannot say how you

will like the ride; but, as you are not here to refuse, I don't see how you can help yourself; and, as the vulgar saying is, I will do as much for you some time.

"Yours affectionately, "AMOS TWITCHELL."

The above is almost the sole specimen of even a disposition to be jocose while writing to Miss Goodhue.

It appears by one letter, that he has already a class of students: —

"Oct. 28, 1814.

"Yours of the 24th was received with pleasure. The contemplated visit will give me pleasure, if it be in my power to be of the party, which shall be my endeavor. My pupils have all left me to attend lectures at New Haven; * and I have this day performed a very important surgical operation; and, whether it will be safe to leave the patient at that time, I cannot say; but you may calculate upon seeing me, unless very urgently detained. . . . Believe me when I tell you, that I sincerely join in your supplication that we may have entire confidence in each other's lasting friendship and affection."

"Feb. 19, 1815.

"Dear Elizabeth, — Your promised letter has not arrived. I conclude that William has not passed through this town, and you are waiting for a few of my scrawls before you send it by mail. You shall have them. Time passes with me much as usual, — much engaged in business, and constantly anticipating future enjoyments. Last Tuesday, about eleven o'clock A.M. we received the joyful news of peace being concluded between our minister and the British. You scarcely can conceive

* Dr. Smith was transferred to New Haven in Oct. 1813.

what effect it produced upon all classes of people in this place. Business was entirely neglected. The bell was kept constantly ringing from the time the news arrived until ten o'clock in the evening; and there was a good deal of powder burnt upon the occasion. In the evening, we had a very splendid illumination of all the houses, shops, and stores, with the meeting-house and court-house. The next day, the street was very much thronged with people from the vicinity, who assembled here to learn the foundation of the news, and rejoice with each other. They kept the bell ringing most of the time this day also. Parker's company of light infantry, and Perry's company of cavalry, turned out in uniform. We are all waiting anxiously to hear that the president has signed the treaty." * . . .

I presume that this description of the intense joy with which news of peace was received by *all* parties in Keene, is only a slight exemplification of the great and unanimous voice of exultation which arose on that occasion from every quarter of our common country. Each party seemed to vie with the other in the utterance of the joyful hopes of peace.

Here is another specimen of his country surgeon's life, under date of March 1, 1815: —

"Had I the poetic talents of ———, I might amuse you with the description of my tour to Stoddard yesterday. I met with as many disasters as he did in his sleigh-ride, when he 'came across back from Pomfret to the Sound on horseback.' In short, I found such snow-drifts, that I was obliged to leave my horse, and travel on

* Peace had been concluded at Ghent, Dec. 12, 1814.

foot three miles out and back again. I was very much fatigued, and took some cold; but I have felt so well to-day that I have ridden thirty miles on horseback!"

The next letter is chiefly occupied with details of arrangements for housekeeping, and anxieties natural to these new hopes. The riding seems still to be any thing but agreeable. He writes thus: —

"We have had so bad riding in this vicinity, that I have delayed visiting Chester, hoping that it would soon be better; though there is scarcely a day passes that I do not ride thirty miles. Yet, after dashing through mud that distance, I am not in a situation to enjoy comfort. If the roads do not become passable for a chaise soon, I shall take the stage and visit you."

In the early part of June, 1815, the worthy couple were married; and, for more than thirty-three years, they enjoyed life together in the quiet daily progress of their wedded state. Mrs. Twitchell had an active mind, which was almost wholly absorbed in domestic duties, and in thoughtfulness for her husband. Her life was one unbroken tissue of devotion to him who was her glory. It has been thought by some who were warm admirers of both, that her great anxiety for his physical well-being did not tend to develop some of the finer qualities of his mind. This remark, however, applies more to the influences exerted by her upon the husband's relations to the world than to their own married state. No man, I believe, ever had a wife who sought more to make home a haven

of rest and of gentle quiet, after long and severe labors. The moment Dr. Twitchell entered the house was the signal for her quiet but efficient energy to display itself in behalf of his comfort. All sounds were hushed, and the repose of his body and mind was considered paramount to every thing else. Unquestionably, this entire rest was at times necessary. It doubtless contributed to his health and long life; and we should therefore be chary of suggesting that any other course would have been better. It is possible that his excessive bodily toil, combined with his great love of social intercourse, might have for ever prevented him from directing much time to literary labor. His natural indisposition to writing was, however, fostered even by the good qualities of his wife, as evinced in this constant and untiring watchfulness for his comfort. Had she been otherwise constituted, it is possible that his life might have been, it is true, less happy, and perhaps it would have been shorter; but he would have had a wider influence and a more enduring fame. If, instead of constantly suggesting quiet sleep for body and mind on his return from business, she had gently led him to overcome his repugnance to writing, — had she stimulated him, as any truly beloved woman can stimulate a man, with a desire for literary reputation, — it is possible that Dr. Twitchell would have left in print a work upon which our profession in future time might have looked with great pride, as upon a monument really significant of his intellectual power. No comprehensive work on surgery, such as a mind like his, and

with his ample opportunities should have left, ever issued from his pen. Comparatively speaking, his life dies with him.

I make these remarks with some sorrow; but, recognizing the mighty influence of woman on man's destiny, I cannot do otherwise; for the records of biography, and the deductions of reason, alike prove that the marriage-vow should not chiefly promote the *repose* of husband or of wife, but should tend to elevate both. While alluding thus to a wife who was so beloved by our departed friend, let me add that regret is merged in pleasure at the thought, that, though her nature did not lead her to the hope of literary reputation for her husband, she seemed verily to worship the great traits of his manly character. By that adoration, her life was made one continued series of self-sacrificing tenderness and love. Her uniform quiet cheerfulness was frequently his support. She was, moreover, a model of a physician's wife, in the care and many kindnesses with which she ministered to those who called to consult him. If he were absent, Mrs. Twitchell knew how to bestow upon them those thousands of apparently unimportant attentions a loving wife will give, when she thinks substantial good will result therefrom to a dear husband's cause.

Growing up thus together, year after year, their ties became more and more close, so that at last they seemed inseparable, and all who knew them felt that to take one from the other would shatter the heart of the survivor. For many years, the wife looked anxiously at the husband, who seemed slowly, but

surely, wending his way to the tomb with malignant disease. Yet, so strange are the mutations of this life, the husband recovers from his disease, and the wife is stricken down suddenly from his side. She died of lung fever, October, 1848. Dr. Twitchell was wholly prostrated by his loss, and for hours he was afflicted with one of his severe fits of despondency. At length, however, his stern reason triumphed, and he came forth again among his fellows. He resumed his rides over his beautifully romantic native hills. Nature spoke to him, as of old, of an all-powerful, all-beneficent Being; and he submitted cheerfully to his lot. Those who knew him intimately tell me, that they think he was never quite himself again. So far as his life was concerned, "the golden bowl was broken, and the pitcher broken at the fountain." He assumed many duties which were new to him in the domestic arrangements, and the current of his existence appeared to go onward in its accustomed routine of daily professional labors.

In speaking thus of Mrs. Twitchell, in order to condense into one passage every circumstance that it was important to relate concerning her, I have anticipated my story. I will now return to it.

Among his papers, I find the following letter, which I transcribe as somewhat indicative of his character: —

(Torn off) 18, 1818.

"Rev. Sir, — As you have long been the friend and acquaintance of my wife's connections in Chester, it is her wish, together with mine, that you or Mrs. —— would

be so kind as to give to N—— B—— the intelligence that her sister Elizabeth, who has resided with us, and been the delight of our eyes, died this morning a quarter before eight o'clock. She was attacked two weeks since with a complaint of the head. . . . As N—— is a child of great sensibility, we concluded, as you were intimately acquainted with her, that you would be the most suitable person to give her the information. . . . In complying with the above request, you will confer a great favor upon your afflicted friend, "AMOS TWITCHELL.

"—— ——, Esq."

CHAPTER VI.

FROM 1815 TO 1849. —— ÆT. 34—68.

Offered a Professorship at Dartmouth College, 1819; at Vermont Academy of Medicine, 1824; at Castleton, 1826; at Bowdoin College, 1826. — Invited to reside at Boston. — Trepannning of Tibia. — Preceded by Sir Benjamin Brodie. — Extensive Rides. — Dangers; Labors. — Circular to Patients. — Letter to a Young Friend. — Temperance. — Anecdotes. — Youths at the Tavern. — Tobacco-chewing. — Farmer and his Corn. — Visit to Philadelphia as Temperance Delegate. — Anecdote. — Temperance Addresses less successful than his Conversation. — Temperance Documents. — Politics. — Asylum for Insane.— American Medical Association; Origin; Interest of Dr. Twitchell in its Welfare; Delegate to its Meeting.

In the spring of 1819, Dr. Twitchell received overtures from gentlemen belonging to the Medical Faculty of Dartmouth College, in regard to his acceptance of a professorship, which was about to beome vacant.

I find the following letter thereupon: —

"June 28, 1819.

"Rev. and dear Sir, — Your polite letter of the 17th instant was duly received. I have maturely considered the propositions therein contained, and have consulted some friends upon the subject; and have come to the conclusion, that to accept of a professorship under the circumstances which Dr. —— proposed would be making

too great a pecuniary sacrifice. Were it probable that I could discharge the duties of the station in a suitable manner, and that the emolument would be sufficient to indemnify me for the sacrifice of business and extra expense attending so long an absence from my family, I would cheerfully accept of the appointment; but I am fully convinced that would not be the case. Dr. —— informed me that the fees of each professor heretofore have averaged about one thousand dollars, a greater part of which would be students' notes, which, in my hands, would not be worth fifty per cent. Besides, I am apprehensive that the number of students will be less than for several years past. All those in this vicinity, who have money to defray the expense, are calculating upon attending lectures either at Boston or New Haven. Had you sufficient funds to give your professors a suitable salary, they would be more useful to the institution by devoting their time and talents exclusively to its promotion; but circumstanced as you are, when the only salary you can afford your medical professors is what they can obtain from young men who are struggling hard with poverty in the pursuit of their profession, it cannot be expected that any one situated as I now am should feel willing to accept of the office. I should anticipate much pleasure in being connected with a literary institution, no small share of which would arise from a personal intercourse with its officers and other literary men. But the uncertainty of health and life is such that I consider it a duty I owe to myself and my connections to devote my time and talents to the pursuit of such objects as will be most beneficial to my fellow-creatures, and at the same time be most likely to afford me a competence when my labors shall fail. Taking this view of the subject, you will not think it surprising that I should decline accepting an

office, the emolument of which would be less than what I derive from my practice.

"I am, sir, with sentiments of great respect and esteem, your obedient, humble servant,

"Amos Twitchell.

"Rev. Francis Brown, President of
Dartmouth College."

In 1824, on the resignation by Dr. Gallup of his professorship at the Vermont Academy of Medicine, the late Dr. Allen consulted Dr. Twitchell about accepting that office. He did so simply as an individual, and I mention the fact merely to show the reputation of Dr. Twitchell. I am not aware that any formal proposition was made to him on the subject. In April, 1826, he received a private letter, informing him, that, if he would consent to accept of the office, he would be appointed Professor of the Theory and Practice of Medicine, Medical Jurisprudence, and Clinical Practice, at Castleton. Dr. Twitchell seems to have felt as on the previous occasion, and to have answered much in the same terms. He proceeds thus: —

"My professional business now is worth more than three thousand dollars a year, and I am so situated that the probability is that it will not diminish, if my health remains good. But, sir, if I should leave my business two or three months in a year, it would go into other hands; it would be thought an object for a man of talents to endeavor to divide it with me, and he would most assuredly be able to accomplish it. These considerations induced me to decline a Professorship in the Medical Institution at Dartmouth College, to which I was appointed

by the corporation a few years since. Had you found that you could give your professor twelve or fifteen hundred dollars per year, then no person qualified for the office would hesitate to accept of the appointment. . . . Taking this view of the subject, you will not think me unreasonable in saying that I should feel unwilling to undertake to discharge the duties of the professorship, unless I can be assured of at least twelve hundred dollars per year.

"I am, sir, with respectful consideration, your very humble servant, "AMOS TWITCHELL.

"Hon. Chauncy Langdon."

In June of the same year, he was invited to be the successor of his able and beloved master, Dr. Nathan Smith, at Brunswick, Me. He received a letter from Professor Cleveland, informing him that Dr. Smith was about to retire. To this letter the following reply was given: —

"Keene, July 28, 1826.

"Dear Sir, — Sickness has hitherto prevented me from answering your very polite letter of the 17th ult. I have yet an affection of the lungs, which renders it doubtful whether I shall be able to attend to much business at present, if ever. Thus circumstanced, you will readily perceive the impropriety of my accepting of a professorship in your institution. Was my health firm, it would be folly in me to relinquish a practice worth between three and four thousand dollars a year in a pleasant part of the country, unless I could be as pleasantly situated elsewhere. I should anticipate much pleasure in being connected with a literary institution, would my health warrant an engagement of the kind, provided I could have a salary that would remunerate me for giving up a

lucrative practice; but, as my situation now is, I must renounce any idea of the kind.

"Accept, sir, the assurance of my respect and esteem.

"Amos Twitchell.

"Parker Cleveland, Esq."

Finally, in 1827, he was requested to accept of the office of Professor of Surgery and Midwifery in the University of Vermont. These offers, made by so many literary institutions, prove that his fame was widely spread. There were likewise many efforts made at various times by individuals to induce him to leave Keene, and to settle in a large city, where a wider field for the display of his talents might have been afforded. It will be perceived by the following extract from a letter, that some wished him to take up his residence at Boston. He did at times think seriously of so doing; but the dread of leaving a certainty, such as he had at Keene, for an uncertainty in a large city, probably prevented him.

"Boston, 5th January, 1821.

"Dear Sir, — It was my intention, before I left Keene, further to converse with you respecting your fixing your residence in this town; but the bustle and confusion of two or three of the last days prevented. In urging you to this measure, if I know myself, I am governed by friendly motives. I have advised with your acquaintance, and others who are acquainted with your reputation, and they entertain but one opinion on the subject, and that altogether favorable to your coming. All the gentlemen of your profession, save two of high standing, would be delighted to see you in practice here. I have conversed with Drs. ——, ——, ——, ——: they express their warmest

wishes in your behalf. If you will take a view of the whole ground, you find that not one argument can be brought in favor of your remaining in that cold, inhospitable clime." . . . .

In 1840 he performed an operation, from which he derived an enviable reputation among his friends, and not a few medical practitioners. The following account of that case I have obtained from Dr. Hosmer of Watertown, who, in a letter to me, writes thus: —

"E—— W——, of N——, Mass. at the date of the operation, February, 1840, was thirty years of age, and of a scrofulous habit. He had suffered almost constant and often very severe pain, just below the knee, for eighteen years. It was always referred to the same place, which presented scarcely any change in the external appearance, save that, under a very careful examination, a slight enlargement could be observed. He had been under the care of the most eminent of the faculty without any permanent relief. At the time above named, while on a visit to his (Dr. Twitchell's) house, I described the case; and, to illustrate his character for rapidity of diagnosis, and as evidence of his professional decision and readiness to proceed at once to a formidable operation in a case extremely rare, I will state his reply. 'There is matter in the bone.' 'Why do you think so?' 'I have seen just two cases.' 'How did you ascertain their character?' 'I amputated and examined the bones.'* On my return

* I have heard from good authority that a deaf and dumb man was at the last operation; and that, when he saw the pus running from the bone, he gave a significant glance at the doctor, and imi-

home, I stated to the patient Dr. Twitchell's opinion; and the next day he was on his journey to Keene, where, on the day after his arrival, Dr. Twitchell trephined the bone, and discharged one and a half ounces of pus. The wound closed in a few weeks, since which time the patient has been perfectly well." *

Dr. Twitchell thought this operation of trepanning the bone was his own, and that no one had preceded him, although it is certain that he never publicly proclaimed this opinion. Most of his neighbors and friends, however, believed it was his. Eminent surgeons regarded it as such. I do not think that he ever saw the paper published by Sir Benjamin Brodie † in 1832; that is, eight years before Dr. Twitchell performed the operation. In this interesting paper, that eminent surgeon gives details of his proceedings in three cases. In the first, amputation was performed. In the second, after partial relief had been obtained by cutting down merely on the bone, trepanning was proposed, and performed with entire success. Subsequently another case happened, in which trepanning was performed imme-

tated with his hand the motions necessary in using a gimlet or awl; indicating that he perceived the leg might have been saved, had the bone been perforated.

* Since writing the above, I have seen a full account of the case as described by the patient himself. By it, it appears that he had consulted the most eminent surgeons in Massachusetts, some of whom had treated him for months. No one, however, had displayed the diagnostic subtlety evinced by Twitchell.

† Med.-Chirurg. Trans. vol. xvii.; 1832; "Chronic Abscess of the Tibia." James Deane, M.D. of Greenfield, Mass. has lately published some interesting cases of the same kind: Boston Medical and Surgical Journal, 1850.

diately, and with a like result. These cases, as I have stated, were published in 1832, in a work which much too rarely found its way, at that time, to this country. I believe that to Twitchell's sagacity his patient owes his restoration to health; and, although I cannot *prove* to indifferent persons that the cases by Brodie were not seen by him, I have reasons which satisfy me that such was the fact.

Dr. Twitchell's medical and surgical practice, during the last twenty years of his life, was very extensive. Before his marriage, as we have already seen, he used to ride on horseback thirty or forty miles a day. In later life he always drove a sulky; and his custom was, when called to a distant spot, to tell the physician he was going to meet in council, that he would be at the appointed spot by a certain hour; that he should wait for him, if necessary, fifteen minutes, but he wanted no one to wait even five for himself. Rising before daybreak, he immediately took breakfast, and was usually far on his way before the dawn. He allowed himself time enough to go the distance required, at the rate of six miles an hour. He, however, always travelled faster than that, and had a series of post horses at the various country inns. In the cold morning hour, the drowsy ostler of some of them would be awakened by Twitchell with orders for a change of horses. At times he was stopped on his route by some patient. If in a great hurry, he would prescribe without getting from his chaise. In the winter time these excursions were very severe; and not a few times he was overtaken, when many miles from home, by one

of those furious storms of snow that sweep over New Hampshire. He was perhaps wholly unable to proceed; the roads being all blocked up, and the storm driving pitilessly upon his wearied horse. On one or two occasions, he nearly gave up all hopes of getting safely home, and thought his last hour was come. Chilled through by the severity of the cold, and covered with snow, there seemed no escape for him. However, his own brave heart and practical common sense sustained him, and he always contrived to overcome the difficulty. Returning home, he would throw himself at full length upon the sofa. "Tired nature's sweet restorer, gentle sleep," would come over him, and in a few hours he would be again able to repair to his accustomed place about the village-tavern to discuss temperance, crack jokes, or talk about his profession, &c. On the next day, he was all ready for another and perhaps similar trip to the mountains. Such has been his course from year to year for more than a third of a century. Towards the latter part of his life, his wide practice and these long rides became so oppressive to him by their very number, that he was obliged to refuse some of them. Accordingly, he prepared the following circular, which is found among his papers: —

"I regret to say, that it is not in my power to attend to half the calls which I have. I do all that I can; and I endeavor, as far as I am able, to do my duty, by attending those cases which have a superior claim to my services. It would be gratifying to my feelings, could I comply with the wishes of all; but that is impossible.

"I consider that capital surgical operations have the first claim, as there is no other operator in this vicinity; after which, my immediate friends and neighbors; and then I enlarge the circle, according to the urgency and importance of the cases: and in this way do all I can."

After he had arisen to fame and to an honorable independence, he did not forget the trials of a young man when just commencing medical practice. The recipients of his bounty were not a few, and the depth of their gratitude their own hearts can alone tell. The following letter to one of them, under date of Nov. 20, 1841, I transcribe: —

"Yours of the 14th instant was received night before last. You say you have not as yet taken a ticket for dissection, and shall wait till you hear from me, as you have not much time, and shall be short of funds. I think it is all-important you should dissect as much as your health will admit, and should advise you by all means to take your tickets for that purpose. Now is your time to lay a sure foundation for future eminence. Your opportunities now are superior to any which I had the means of enjoying when I was a student; and I have no doubt you will, by your industry and perseverance, make the most of them. It certainly will be a great gratification to me if I should live to see you taking a high stand in the profession, and should consider myself remunerated for all I have done or shall do for you. I know that you will not spend money for nought, and I shall be willing to furnish all necessary funds. I wish you to write me frequently how you get along. If you learn of any improved surgical instrument, or any valuable medical or surgical treatise, which will be very useful, I wish you to purchase them,

and I will forward you a draft or cash for what you may want at the close of the term; a short time before which, I wish you to write the exact amount that will be wanting. — Yours affectionately,

"A. TWITCHELL."

Dr. Twitchell seems to have early learned the advantages of temperance in the use of alcoholic and intoxicating drinks, and most steadily did he adhere to the opinions instilled into him by his parents. He was at times quite severe in his denunciations of the habitual drunkard, and was not afraid to speak to any one on the subject. In fact, some of those who were disposed to drink regarded it as his favorite "hobby," and thought he was officious in proffering advice. He often alluded to it whenever an opportunity offered. The following is an amusing illustration of his method of treating the subject: It was a very cold winter's day, and Twitchell had been riding far and long, and had stopped to rest and warm himself at a country inn. While waiting, and enjoying the genial glow of the roaring fire, two young men entered the bar-room, and in boisterous tones asked for liquor. Decanters were placed before them, and their potations were by no means small. After looking at them a short time, Twitchell, in a similar manner, went to the bar-keeper, and asked for a glass of water. The water-jug and tumbler were given to him, and he drank as much as he wished. He then took out his purse, and laid a ninepence upon the counter. The attendant stared, — the youths smiled at the "greenhorn." "We don't ask any thing for water," said the waiter, with a suppressed

titter. "Oh!" said Twitchell, "I can better afford to pay you ninepence for a glass of water and the benefits of this warm fire, than these young men can afford to pay half that sum for liquor." As a general rule, he held no long arguments. He desired to produce the requisite effect by a style more simple. In case of poor men, he tried to overcome the habit by keeping the individuals at work. One poor fellow came to split his wood, when so full of tremor from the effects of recent debauch that he could hardly stand. Whilst there was a will to resist the tempter, he was gentle as a woman with the sinner; but, if he perceived a dogged determination to continue the evil course, the vials of his wrath would be opened upon the unhappy victim of appetite. He was probably more severe on these persons, from the fact that he was so constituted as to be able to control entirely the indulgence of his own appetite for food and drink.

His dislike for tobacco-chewing and smoking was equally great. He had a theory upon that subject, which he undoubtedly carried too far, but which is true in many instances. He told me that he believed that tobacco killed more persons than intemperance. The following anecdote is related of him: A farmer who lived some twenty miles from Keene, and who had often supplied the doctor with grain, was met by Dr. Twitchell one day when he was looking miserably out of health. On being questioned as to his health, he replied, with a very serious face, "Almost gone, doctor! I shall never bring you any more corn. The physicians have all given me up,

and tell me I am dying of consumption." "Ah! indeed," replied our friend, in his lively tones; "I am quite sorry I shall have no more of your corn; but possibly, after all, it may not be so bad as you think: I may be able to cure you." "It is too late," solemnly replied the man; "I must put my house in order, and prepare to die. So all tell me, and I believe them." "But," said Dr. Twitchell, "I will make a bargain with you. You shall agree to follow my prescriptions three months: if you recover your health, you shall pay me fifty bushels of corn; and, if you fail to follow the prescription, you are likewise to pay me fifty bushels of corn: but, if you follow the prescription without getting well, I will pay to you or your heirs the value of fifty bushels of corn, without receiving any compensation." To this, after some demur on his part, the invalid agreed; and was immediately directed to take the quid from his mouth, to dash it to the ground, and never to touch tobacco in any form again. Six months or more passed away, when Dr. Twitchell met the man, apparently in perfect health, and claimed the corn. The farmer declined paying it, saying that his wife thought it more than his life was worth! He, however, finally compromised the matter, by leaving three or four bushels of corn and a bushel of white beans! (See Appendix L.)

In 1832, Dr. Twitchell made a visit to Philadelphia, as a delegate from the New Hampshire State Medical Society to a convention of the friends of temperance in America. While there, the following anecdote occurred: Twitchell met many old ac-

quaintances, and made several new ones. With one or another of these he was constantly conversing, when at the hotel; and invariably his bright, eager, and jovial mode of talking would draw a crowd around the party. This was just the element he liked; and usually he would engage in long discussions on any subject that happened to be brought up, or perhaps he would give an extemporaneous lecture on the pathological effects of alcohol or tobacco. One day he had been describing, in his exquisitely graphic manner, the gradual inroads made by tobacco upon the human system. He first displayed the gentlest effects of this "celestial drug." The slightest nervousness or most trivial pain was perhaps all that the sufferer noticed. Then came the horrid dreams and nightmares dire, with indigestion and all its miserable train. After talking thus for some time, he proceeded still farther, and had just touched upon the point where, according to Dr. Twitchell's theory, the victim of appetite will see death staring at him. All his audience were listening with deep interest, and silence reigned in the room, when suddenly one gentleman dropped senseless. He had listened with great attention, and was horror-struck at fancying that he had arrived at the fatal point in his journey as a tobacco-chewer. He, however, soon recovered from his swoon, and from that moment forswore the use of the article in any shape.

Dr. Twitchell was not unfrequently invited to deliver temperance addresses. He sometimes did so, although he was not so successful in a lecture or

continued speech as he was in simple conversation on the great topic to which he devoted so much of his life. It is well known that he gained for himself many enemies by his bold denunciations of those who sold intoxicating liquor. It has been intimated to me, that the venders of the poison intended, by a deeply contrived plot, to utterly ruin, or at least injure, him in his pecuniary resources; and that a trivial occurrence, though very honorable on the part of one of his enemies, alone prevented the catastrophe. Twitchell was not one to think of consequences to himself, when a principle was involved. Would that we had more men like him in this respect!

The following documents I find among his papers: —

"Your plan meets my views, and shall have my cordial approbation and support. For thirty years have I unceasingly labored to convince my friends, that ardent spirit is not only an useless but a dangerous beverage; and for more than twenty-five years have I professionally and publicly borne testimony to its pernicious and poisonous effects upon the human constitution. Never have I used it myself, or offered or given it to others, except as a medicine in sickness, and as such but seldom. The exertions which I had for so long a time used induced the friends of temperance, when societies were formed in this State, to elect me president of the town and the county, and subsequently of the State society. The two former offices I still hold; but, at the last meeting of our State society, I was not present, and have not seen any official account of their proceedings, but have understood that Edmund Parker, Esq. of Amherst, was elected president."

"Keene, January 3, 1832.

"Dear Sir, — Your letter bearing date December 1st, 1831, directed to Salisbury, N.H. enclosing a circular of the New York Temperance Society, has but just reached me. The cause in which you are engaged has long been the object of my most strenuous exertions. The plan which you propose [Sentence unfinished.]

"I should consider it an honor to have my name attached to the circular, as you propose; but, although there is no date to the one you enclosed, yet I suppose it would be desirable that the names of the present officers should be attached; but of that you can best judge. You have full liberty to use my name if you think best: if you do not obtain the name of the president for the time being, and you date your circular the present year, I would suggest the propriety, if you use my name, to attach it as president of the Cheshire County Temperance Society, and late president of the New Hampshire State Temperance Society. Our county society will meet in a few days. I shall read your circular to them, and have no doubt but that they will highly approve of the plan, and will order a large number for immediate distribution.

"Our State society will not hold a meeting again till next June, unless there is one specially called: of course your plan cannot be laid before them till that time, previous to which I think much may be done by our town and county societies. If it is your desire, I will forward your letter and circular to ——." . . .

In politics, Dr. Twitchell was in early life a federalist, and afterwards a staunch whig. He followed, like many others, the rule of the party leaders; and yielded, as it seemed to some of his friends, a blind deference to the opinions of the great men of that

party. He was, however, what might be called a reasonable conservative, — not a zealot in whiggism; but at the same time he had an almost holy horror of any taint of democracy, as he saw it in New Hampshire. Daniel Webster was his file leader, his Magnus Apollo; and he listened to his voice as to that of a god.

Dr. Twitchell was very much interested in the establishment of the Asylum for the Insane in New Hampshire, and continued to be so for some months, until he thought that politics, which in this country creep in everywhere, were associated with the management of the institution; then he retired in disgust.

In 1845–6, the germs of the present American Medical Association were planted in the State of New York. Chiefly to the labors of Professor N. S. Davis, now of Chicago, then resident at Binghamton, New York, does the medical profession owe the scheme of this association, which has already done very much towards raising the standard of the medical profession in the United States. It has done this, not so much by the enactment of specific laws and the adoption of certain votes; for upon some of these latter measures there is a great discrepancy of opinion. But for the stimulus it gives to individual action, in consequence of the congregating together of so many of the really zealous and learned of the profession; for the kindly sympathies its re-unions excite in the bosoms of all; for the liberal opinions which the members gain by meeting and comparing views, as diverse as those of a profession extended over so

large an extent of country must necessarily be; above all, for the noble *esprit de corps* which it raises amongst us,—for these benefits, and others incidental thereto, this association and its founders deserve high praise.

Dr. Twitchell early took an active interest in it. He was not, however, present in New York in 1846. At Philadelphia, he appeared as delegate from the New Hampshire Medical Society. He was a member of the National Committee that year. He enjoyed very much the society of the magnates of our profession, about whom he had heard so long, some of whom, however, he had never seen. In 1848, his nephew, Dr. George Twitchell, attended in his stead; for it seems to have been his purpose that one or the other should always be present, as had been the case for years with regard to the New Hampshire Medical Society. In truth, he believed that actual bodily presence is a more manifest proof of the interest that one takes in any association than any amount of writing or talking upon the subject. We all remember him at the meeting in Boston, at which time he presided over the National Business Committee, which was composed of the *élite* of the profession. In the general meetings of the association he never spoke, save on business connected with this committee. He was one of those men who talk little in public, but much in the private circle; so that his influence, perhaps unseen, was all-powerful. I have learned that he was particularly delighted at this meeting with the attentions paid to him by the younger members of the profession, whose

spontaneous outpourings of respect he received with a modest self-complacency, which was at times quite *naïve* in its manifestations. He possessed the attribute common to every commanding intellect, — a consciousness of power, which demands no external tributes of respect, nor are they necessary to its happiness; but, if given, they are accepted with the simplicity and delight a child may manifest when receiving the caresses of its friends. In Boston, as in Philadelphia, he met with most of those who, in different quarters of the Union, had gradually like himself been rising to an honorable fame: A. H. Stevens, the Nestor of New York Surgery; the distinguished President of the Association, J. C. Warren, of Boston; his early friend, Shattuck, whose heart had been well knit to his, ever since they bathed while youths in the waters of the Sowhegan; Dr. Knight, of Connecticut, who, though still in the prime of life, reminds us, by his elegant and accomplished mind and manner, of the perfect gentleman "of the old school;" a host of worthies from Philadelphia, young and old, among whom rise pre-eminent the two Jacksons, — the veteran and well-beloved professor, and he, of sterling worth, from Northumberland; his old pupil, Bond; and, drawn towards him in a particular manner by the kindred pursuit of surgery, the young, earnest, and rising Mutter. From Maryland appeared to greet him the honored son of an honored father, Nathan R. Smith; and, finally, from the Far West, his long-tried friend, Professor Mussey, of Cincinnati. In addition to these, I may, not invi-

diously I hope, allude to Parker of New York, and Johnson of Missouri, as two of the younger scions of surgery who were delighted to do him reverence. How much he enjoyed the society of these and of many others none now can tell; but it is certain that he returned to the Granite Hills refreshed and invigorated for new labor; and one of the severest trials of his latter days, to which he could scarcely allude without tears, was the fact that he could not meet again the hosts of our honorable calling at the Queen City of the West, where Drake and Caldwell, Miller and Gross, Johnson and Mussey, would have received him with open arms upon their own ground. Fate had decided otherwise. His failing health warned him not to try such a journey; and, in a few weeks subsequent to the meeting in Cincinnati, he was no more.

CHAPTER VII.

FROM 1815 TO 1850. — ÆT. 34—69.

Social Qualities. — Jokes at the Hotel. — Repartee to a Lawyer; to a Friend. — Intercourse with Medical Associates. — Autocrat of Surgery. — His Faith in the Profession. — Intercourse with Patients. — Roughness at First. — Exquisite Tenderness. — Behavior in the Chamber of Death. — Kindness to the Poor. — Anecdote. — Practical Tact. — Violence occasionally. — Allegro and Penseroso. — Delights of being Bled. — Neuralgia Case. — Hatred of Quackery. — Open Confidence in Patients. — Willing to confess Error. — His Operations; Anxiety to act rightly about them; Calmness while performing them. — Private Hospital. — Intercourse with his Family; Children. — Domestic Discipline. — Religious Views.

No one ever enjoyed better than Dr. Twitchell the society of human beings. He found a certain degree of pleasure in the contact of any man, however humble or ignorant. This tendency, combined with his jovial spirit, led him, as we have seen, frequently to the village tavern. In former days, when an arrival of the coach was an important event in the history of each day, and in later times, since the car's whistle has superseded the coachman's horn, he was always present, if professional business would allow, at the time of the arrival of passengers. Cordially did he greet old well-known friends; and how slily

did his bright gray eye shine out inquisitively upon the face of the stranger?

Whenever a knot of merry laughers was seen near the main hotel, one might be almost certain to find Twitchell among them. It was in these coteries that he preached upon intemperance in the use of wine and tobacco. At the inn, too, he would tell his jokes; and, in early life, it is said that he often spent half the night at whist, after having passed the day in riding far and near. Such associations might seem likely to contaminate; but this was not the case with him. His amusements were innocent.

His powers at a quiet repartee were great. I have heard the following anecdotes: —

Dr. Twitchell, in the early part of his residence at Keene, had been called as a witness in a case of malpractice. As was usual with him, he gave his evidence coolly, but decidedly. The opposing lawyer had, at a cross-examination, a great deal of the peculiar skill for which the bar of New Hampshire has been always celebrated; and on this occasion he pressed hard upon the young physician. The doctor, in his testimony, had stated some things in reference to medical cases among the Indians, and the lawyer thought to make him confess ignorance upon the subject. In vain did the advocate approach the matter. Twitchell was armed at all points with simple truth. Finally, his opponent abruptly asked, "Why, how can you know about this? Have you ever been among the Indians?" Twitchell stopped a moment, and then, looking steadily at the advocate, said with the most gentle and yet

cutting irony in his manner, "I have sometimes been with half-civilized persons!" The shock was electric; the whole court was convulsed with laughter at the "palpable hit." The lawyer was taken by surprise, and completely silenced so far as cross-questioning further in that case was concerned. I believe very few members of the bar ever afterwards wanted to try their skill at making Dr. Twitchell contradict himself. He was quite a match for any one.

At times his repartees were severe. Some years since, two noted persons were at Keene at the same time, namely, Gov. D——, of ——, and a celebrated convict, who had escaped from several places of confinement, and at length was safely secured in the stone jail at Keene. One day, a friend met Dr. Twitchell, and said jocosely, "Well, doctor, have you called at the Cheshire upon Gov. D——?" "Oh, no!" instantly replied Twitchell, "I have not yet paid my respects to Hicks!"

An eminent jurist informs me, that Dr. Twitchell was not generally sought for as a witness in favor of wills made during the last illness of the testator, because he had great doubts as to the perfect sanity of a person when near death. These doubts arose from the following incident: A patient was supposed to be near dying; but, as his mind seemed perfect, his will was made, and the doctor was a witness of it. The man did not die; but, on his recovery, he had not the least recollection of ever having attempted to make a will, and could not tell any of its provisions! This incident, of course, shook his faith in all wills made towards the end of life. While

appearing as a medical witness, Dr. Twitchell was unusually clear and precise, and avoided as much as possible merely technical terms, so that the court and jury always bore testimony to his skill.

In his intercourse with physicians, he was a man who never asked for a consultation. He was a law unto himself. Doubtless he felt himself quite equal to any, and altogether superior to most physicians. Whenever he did meet his professional brethren, he was scrupulously fair and courteous. His innate sense of justice kept him true, and he was too proud to be unjust even if he disliked a man. Sometimes, when dealing with a pretender, who covered his ignorance with high-sounding words, he would, with perfect Socratic simplicity, ask what he meant by some peculiar idiom or word, knowing all the while that he was about to make the fool prove his own folly. He was a most thorough hater of all hypocrisy in medicine as in religion; and his powers of vituperation were not small, when he came closely in contact with a quack. Rarely has any one appeared to me to desire more to avoid even the semblance of quackery. If a physician had once treated him improperly, he never forgot it. The remembrance would at times peer forth; but this prejudice seemed rarely to influence his reason, and he always treated such a man impartially unless he had been guilty of some moral obliquity, and then he refused to meet him by the bedside of the sick. A tenderness, however, to the failings of those who had been his pupils was quite a marked trait in his character. Early acknowledged by the profession as the great man of

that region of the country, he became at length, says one of my correspondents, "the autocrat of surgical matters over an immense body of the profession,— the great operator and the grand arbiter of all their surgical disputes." He had a beautiful faith in the profession as a body. If any one told him that other physicians had spoken ill of him, he would always try to explain the fact in the most favorable manner, or he would laugh it away with the sunny remark, "No! no! he is a clever fellow, he never said so of me. You are mistaken."

At the first introduction of patients to Dr. Twitchell, there seemed to some a certain degree of stern *brusquerie* about his manners, that was rather repulsive. Women, in an especial manner, seemed to fear an unkind and perchance coarse mind. But how soon did they discover their mistake! for the liveliness of his conversation, his thoughtfulness of their peculiar state of mind, and his almost feminine delicacy of sentiment, quickly overcame their doubts. He was to them gentle as a mother, and perfectly regardful of all those little niceties of expression which a true regard for woman begets in any manly soul. I do not mean by this expression, that he indulged in small talk, and the infinitesimal nothings with which some think they should address a female. Far from it. His tenderness towards the other sex arose from a delicate regard for the noble nature of woman, which springs naturally up in the heart of a great-minded man. How versatile his talent for winning away the thoughts of the sick man from his despondency, or of the woman from her restlessness!

How soothing the pressure of his hand as he sat by the side, and told perhaps of merry scenes that were enacting abroad! What admirable adaptation of language and sentiment, so as just to suit the temperament, age, and sex of his patient! * Early in his practice he formed a high estimate of the moral power which the physician may exert. Hence he sought always to control the mind of the invalid, — knowing full well that thereby he should wield a mighty lever for the perfect restoration to health. Thinking very little of his fees, but much about the cure of his patient, he was equally devoted to the rich and the poor. His tenderness and consideration for the feelings of the poor have been mentioned to me by some of them with deep emotion. The result was, that all looked to his visits as the brightest hours of the day. One of my correspondents, to whom I am much indebted for the earnest interest he has taken in giving me a life-like sketch of Dr. Twitchell,

* I cannot forbear quoting the following, written to me by one whose strong mind renders her fully capable of appreciating intellectual and moral greatness, while at the same time her sex teaches her to value delicacy of thought and of action: "Dr. Twitchell's tender-heartedness, concealed under his rough exterior, was another very beautiful point in his character. I remember, on the occasion of the death of a brother of mine, I had been quite shocked with his apparent indifference during the illness; but, after his death, which occurred perhaps at 2 A.M. he spent nearly the remainder of the night with us, uttering thoughts full of consolation and wisdom. The next day, too, looking at the little face, he said, 'This reminds me of Byron's lines, —

> Before decay's effacing fingers
> Have swept the lines where beauty lingers.'

It was an unexpected revelation of sweetness and refinement, for which I was not prepared."

writes thus: "The influence of his conversational powers in a sick-room cannot be described. The first time he visited me in a protracted illness, hardly a word was said about my case; and yet, by amusing and apparently irrelevant stories, he had managed to let me understand my condition better than I ever had before, and to leave in my mind a conviction that he, at least, knew all about it. I have never," he continues, "in more than two or three instances, met a man who has given me so decided an impression of a strong original genius. No man could be less formal, or more entirely without pretension. His professional skill, to us out of the profession, seemed like intuition."

Another correspondent says "he had a great deal of what is called practical tact. His extensive business rendered time precious to him; but in the sick-room he seldom appeared to be in haste. He would listen patiently; but, by a few questions, he would, without seeming to interrupt, cut short the details of the sick person, or of the attendants, and proceed forthwith to give his directions. Some persons of his own profession, on their first acquaintance with him, regarded him as too hasty in his diagnostic conclusions; but they soon found that it was not best to question their correctness, for the result of further examination was pretty certain to verify the accuracy of his judgment."

Some amusing anecdotes are told of his eventful career of practice, illustrative of his influence over patients. He used to say, "When a person sends for you from a great distance, you may be sure that

he will be better for your visit, whatever may be your prescription."

An old woman called on him to be relieved of a tumor, which she was fearful would eventually destroy her life. Dr. Twitchell found it was of such a character as not to be injurious, if the patient could be persuaded to give up touching and thinking so constantly upon it. Accordingly, he prescribed a simple ointment, to be applied at certain stated and distant periods; and that, during the intervals, the part should not be *touched.* He assured her she would get well, if she would implicitly pursue his directions. Having entire confidence in her physician's powers, she followed to the exact letter every rule he laid down, and a cure was the result.

The following was related to me by the patient himself: Some thirty years, or thereabouts, a couple of worthy deacons were travelling for pleasure in their own one-horse chaise, towards the White Mountains. In their dispositions, they might be said to be fair representatives of the difference between L'Allegro and Il Penseroso. Under these names, therefore, I shall continue my tale. Penseroso, being somewhat of an invalid, resigned most of the active duties of a traveller to his more jovial friend; and so, jogging on together, they were a mutual aid and source of contentment. Hard by Keene, however, are some very rough mountains, as Dr. Twitchell well knew by experience, and which our worthy friends were destined to learn by experience, still more dire; for suddenly, while descending a winding road, L'Allegro's powers of driving were set at

nought; the chaise was upset, and both were thrown heavily to the ground. By dint of the assistance of passers-by, they were set upon their journey again. But it was no longer a laughing matter for poor L'Allegro; for every time an uneven place occurred in the road, or even a disposition to be merry came over him, and the action was suited to the thought, he was seized with a most violent pain in the side of the chest. He said nothing, however, for fear of disturbing the equanimity of his pensive companion, and rode on with the trouble gradually augmenting, until it seemed to him as if the slightest approach to a laugh was agony. Arrived at Keene, he informed Penseroso that they must resign their respective duties. He himself must now be the patient, and he hoped his friend would assume the responsible duties of nurse. Meanwhile, however, he begged that his old friend Twitchell might be sent for. One can readily imagine the unhappy state of things, when two inveterate jokers and old friends meet, and have to restrain their mirth. "I must bleed you," said the doctor. "For Heaven's sake don't!" gasped the sick man; "I never could bear the sight of blood without fainting, and I shall certainly faint with the first drop I see of my own!" The doctor said nothing more about bleeding, but began talking in his old jovial strain, and immediately the mind of his friend was transported to scenes long past, and revelled in the jokes of former days. Meanwhile, the preparations for bleeding went silently on; the arm was bound up; even the vein was opened, and still no tremor; no serious thought on the part of the patient of what

was going on; and finally, at the termination of the whole operation, he concluded that he would submit willingly to be bled by such a man as Twitchell every week of his life! He had really made a pastime of what had been so dreaded. This patient soon recovered, and now lives in the genial atmosphere of a happy and robust age, enjoying the pleasures of a well-spent life. He fully appreciated the real value of his early friend, when he said to me in the last interview I had with him: "If I had not seen Twitchell for twenty years, we should have met however as boys, so hearty and youthful did his temperament remain to the last. I never," he added, "was in Twitchell's society half an hour, without finding something in his conversation that was original, refreshing, and exhilarating."

Another anecdote illustrative of his rapid diagnostic powers and of his quaint prescriptions may be told. He was riding one day rapidly onward to meet an appointment, and had stopped on the banks of a river for the ferry-boat to return. The rumor of Dr. Twitchell's presence being noised abroad, a neighboring devotee of St. Crispin rushed forth from his hammer and last to consult him. The doctor was in his sulky, and, having only a few moments to spare, cried out, "Go into the house and boil your hammer, and touch it to the part." Saying this, Dr. Twitchell sprung from his vehicle, and, having heated the hammer in the good housewife's pot of boiling water, applied it with instant relief to the part affected. I have understood from good authority, that the sufferer never had another paroxysm,

and the surgeon was considered as having performed a miracle. The prescription, however, was not original; the peculiar method of applying it was his own.

At times he was very violent, and especially was this the case with those who, knowing the right, still did wrongly. Such a course being so entirely contrary to his own principles of action, he retained no patience for any one who followed it. On one occasion, a man, whose family he had attended, and who was himself known to be intemperate, called him very hastily to go to see his daughter. "I wont go," said the doctor. "For God's sake," replied the agonized father, "go and see my child, and I will pay you what you ask, or work for you as long as you wish." "I *wont* go," again sternly shouted the doctor; "you may offer whatever you wish, and you will not persuade me; but, if you will promise to give up your beastly intemperance, to become an honest man, and to take care of your family, then I will hereby agree to attend you all for nothing." Rumor does not say whether the pledge was taken. The doctor is believed to have seen the patient.

Dr. Twitchell scorned all quackish cajoling of patients, and despised that pettiness of soul which some of our most eminent practitioners avow and act upon; namely, that there must be some air of mystery around the recipe of a physician. To those who say that a physician cannot succeed in gaining an honorable practice, if he talk freely with his patients upon their diseases and his own treatment, I might quote Dr. Twitchell as an illustrious example of the falsity of their views. He conversed

with perfect openness, and was not afraid even to confess that he had erred in his diagnosis or his treatment. To me this seems a trait of surpassing beauty; for "to err is human," to be willing to confess that error is divine. His desire to avoid all circumlocution, and to state precisely what he thought and in the plainest manner, led him to avoid the use of Latin in his prescriptions, and the usual heathenish symbols of measures and weights that have descended from the dark days of our profession until now.

In his operations, he was slow, deliberate, and conscientious. I have elsewhere mentioned, that as a boy his feelings were so tender that he would weep at the sight of a cat torturing a mouse; yet in after-life he dared to perform any operation upon the human frame. How shall we account for this? Not certainly from any callousness having gradually come over the fine structure of his heart; for on the nights preceding all operations he was restless, and uneasily inquiring, "Is it right for me to operate? Would I, were I similarly circumstanced, allow the same operation to be made upon me, or any of my family?" But, when he came to the hour for operating, he was cool and calm as a man at prayer. Was that heart hardened to the sight of human suffering? Oh, no! far from it. It was ready to gush forth with the tenderest emotions; but duty called upon him to stifle them, and he did so. It is not true that the practice of medicine or surgery leads to carelessness of human life and suffering, as some ignorantly suppose.

For several years before his death, he had a private hospital of his own; and his devotion to all the really sick and suffering, whatever might be their condition, was admirable. He has been known to leave his own house and visit them several times during the night, in order that they might not suffer. They were all regarded as his children; for whether rich or poor, beautiful or ugly, or afflicted with loathsome disease, — to each and all were his attentions unceasing.

In his intercourse with the immediate members of his household, he was proverbially benignant. Stern, slightly abrupt, and perhaps a little irritable, he might be at times, on his return from long and fatiguing drives, but never violent. Almost a spoiled child, as he was in certain respects, by the tenderness of his wife, every thing was yielded to him on such occasions. Every noise must be stilled. Even the merry tones of childhood, when bursting forth like the joyous notes of the birds in spring, were hushed. The doctor usually threw himself upon his sofa, covered his face with his handkerchief, and either seemed to be or did actually fall asleep. At times, however, some of the more roguish of his young companions would test his powers of endurance; and, by that winning way which childhood alone, in its beautiful unconsciousness, knows how to tread, persuade him to forget his fatigue of body and the various discomforts arising from his intercourse with man, in perhaps boisterous merriment with the child. Alas! how little do most of us appreciate in older life the rich enjoyment we might experience, if we would only

have perfectly unfettered intercourse with the soul of childhood! As nothing mortal can be more fragrant than the babe in its mother's arms just emerging from its morning bath, so in the spiritual world nothing can be to us, in the meridian or decline of life, so pure or holy as the native outgushing confidence and love with which a child will always nestle to the bosom of one older than itself. The ages are complements of each other. An orphan girl and a childless old man are correlative terms. Thrice happy are they who, while the cares of the world have been gradually enclosing them, have still kept their hearts so warm that even the vivacious roguery of childhood will lighten instead of increasing their already heavy burdens. Dr. Twitchell was such a one. There are those now alive who will remember the quiet and peculiar laugh with which on such occasions their stealthy touch of the apparent sleeper was sometimes greeted; and how they climbed at last, unchecked in their wildest glee, high upon his shoulders. These may seem minute details; but to my mind they illustrate one of the fairest traits of his character. Need I remind those who once were the recipients of his bounty, of those formidable-looking pockets with which he entered the house on Christmas-eve? What a multitude of questions as to their contents, and what earnest efforts of young hands to enter the forbidden precincts! Can those who then were young ever forget the mock-heroic and stern style with which all points of approach were guarded, while the formidable words "medicines," "you must not touch," &c. were wholly contradicted by that

peculiar twinkle of his eye, and the inimitable half-suppressed laugh, so suggestive of a merry soul, and which was as *Twitchellian* in its characteristics as the roll of Dr. Johnson's huge frame was all his own? The heavily-laden stockings of the young folks always subsequently proved the generosity of their domestic Santa Claus.

At times he was called upon to rebuke for wrong-doing the young people under his charge. How shall I describe his rebukes, which were not so much in words as in the depth and tenderness of his tones, rather of grief than of anger? On such occasions his words pressed like hot iron into the heart of the offender, leaving indelibly impressed the idea of its error, and bringing a determination never to do a like deed. It will be seen by this that he was by no means a believer in Solomon's rule of the rod. The wise man therein fails of reaching the loftiest wisdom; that is, if we take the passage in its literal sense. As a metaphor, and as meaning discipline, Dr. Twitchell had an entire confidence in the doctrine. Who, in fact, could think otherwise? But he was not satisfied with merely playing with, or correcting, the children that were under his influence. Philosopher-like, he desired that some instruction should be generally mingled with their sports. He had no regular hours of study with them; but he often taught them while they were sitting upon his shoulder, — a favor which he granted a longer or shorter time, according to the attention paid by them to his instruction. Not seldom did he summarily drop one of his young friends from that place so attractive

to a child, on the first evidence of carelessness in giving heed to his words.

Nothing is more interesting to me than the contemplation of the earnest inquiries of a strong soul after philosophical and religious truth. The religious sentiment being the first around which all others must revolve at one time or another during one's earthly life, and the idea of Deity being the greatest that any human being can grapple with, we naturally turn with some anxiety to learn what any great man thinks on the subject. I have sought to obtain correct views of the opinions of Dr. Twitchell upon the nature of man, and of his relations to others of God's creatures. I have endeavored also to find out his opinions in regard to God and Christ. Surely no nobler themes for contemplation can be presented to the human mind! I would premise that I never conversed with him upon these great topics, and the following statements rest upon the evidence of others. A correspondent says, "On religious subjects he was reserved. He supported the institutions of Christianity; but if any one attempted to draw him out, and get his distinctive views on questions of controversy, the inquirer would find himself defeated. He could hardly tell how; for the doctor kept on talking, and generally ended by getting the questioner interested in some other topic, so that the subject of his inquisitiveness was forgotten."

There seems to be no doubt that his tendencies were not towards the highest spiritualism, while at the same time he denied that a materialist view of the universe was inconsistent with the doctrine of the

immortality of man, which he fully held. His view of the creation was that now adopted by some of the most able writers of the present day, viz. that, in the Almighty's system, man and the smallest of the zoöphytes form but two extremities of one vast chain of life. He thus linked himself with all beings of a higher or a lower order, as we usually estimate them, but which are only different parts in the one great plan of God. According to Dr. Twitchell, man is endowed with intelligence, in consequence of his higher physical organization. The chimpanzee is his "cousin," however "ugly" he may be; and the horse knows well his voice, and reasons with him. With the nature of God he troubled himself but little; probably esteeming it as a subject far above his comprehension. To the Unity and Trinity, and other minor views held by various sects, he paid no attention; although he told a friend who asked him to subscribe for an orthodox work, that he was "as much orthodox as any thing." As I view him, his soul was too great to be trammelled by any of the puny creeds that divide the world. Perhaps he would have agreed with Aimé Martin,* that "mere sects are impieties before God." God to him was an ever-present, eternal, illimitable, beneficent Being, who knew all his thoughts, and looked kindly even upon his errors. He regarded him as a Father rather than as a Judge, and quietly rested in that faith, even till the last hour of his life.

Another of his friends, in a letter to me, says, "I

* Education des Mères.

have heard him declare his unqualified belief in God and immortality. I have heard him, while holding the dissecting-knife in his hands and pointing out the delicate structure of the valves of the heart, or some other wonder of our frame, repeat with earnest emotion the lines of the poet: —

> 'Strange that a harp of thousand strings
> Should keep in tune so long.'

He dwelt feelingly on the goodness and skill of God in the creation, and enjoined it upon one of his morbidly disposed patients to turn to their contemplation as a remedy for his dark thoughts."

He, however, rarely attended church. Probably this was owing in some degree to the fact, that his extensive business occupied most of his time. In later life, his health would have prevented. I question much, however, whether he was not one of those who feel that the services of the church have lost for them most of that holy unction with which, in ages gone by, they used to impress the hearts of all worshippers. He perceived, moreover, in his intercourse with the world, that men too frequently seem to think that attendance regularly upon divine worship twice each sabbath absolves them from a life of stern integrity, instead of strengthening them to high resolves and perfect truth. In his jocose manner, he used to say that a deacon cheated him on a week-day worse than any one. Yet he had a sincere and hearty respect for a devoted and active minister of religion. No one ever had a higher regard than he

had for a man like that noble ideal given by Herder of the "Preacher of God." *

"The manifestations of piety," says one of my correspondents, "he always treated with respect." I may add, that, when he perceived a true heart was the cause of it, even religious officiousness and impertinence always met with kindness from him. A remarkable illustration of this occurred several years ago. A female of his acquaintance, while under high religious excitement, called upon him, and said she had an important matter on which she wished to converse with him. She seemed, however, to shrink from speaking, for fear of giving offence. He begged her to proceed with the utmost frankness, and assured her that she could say nothing that would offend him. She then stated that she had been called by God to speak with him boldly upon the state of his soul. She felt that he was living alienated from God, that he should awaken from his lethargy, and prepare by religion and the church for death, which might happen to him at any moment. Having heard her with much gentleness, he thanked her for her kind thoughts on his behalf, and said that he honored her for her frankness, at which he could not for a moment take offence. He concluded thus:

* "He stands in the midst of his friends and children. They press around their father; around the man who is anxious for the welfare of their souls; who knows them in their houses and in their hearts; who consoles them in the troubles of this life, and seeks their happiness for eternity; whom they know as a pious, upright, and judicious man, who speaks every word from the heart. He is the Preacher of God!" — *Christian Examiner*, 1835, vol. viii. new series, page 179.

"But, my friend, you are mistaken. God never told you to call on me. He knows my heart better than any one else, and I *know* that he never sent you. Our prayers," he said, "should arise in every action of our lives, and we should be constantly prepared for death by always living rightly." — Noble thoughts, kindly expressed by a true heart! *

Of hypocrisy in religion, and in attending religious worship, he had a most thorough hatred; and he would be very sure to apply the lash of his cutting but quiet humor whenever he saw evidences of this meanness. He spared neither high nor low. Anecdotes might be related illustrative of his keenness, but generally modified by his excellent good nature on such occasions.

His views of Christ and of his religion may be inferred somewhat from what I have already said. He has been called by some, "an aboriginal Christian;" — an expression which seems to me very happy, and exactly descriptive of him. In those great elements of a religious soul and Christian life, justice, truthfulness, and benevolence, he stands pre-eminent. His great reverence for goodness and for natural simple piety, wherever found, prove that he had a corresponding chord in his own bosom. Above all, the calmness which possessed his soul at the approach of death indicates the religious spirit, although, as

* I have been told, that, when this good woman appealed to the doctor to allow her minister to call upon him, and talk with him about religion, he told her, rather irreverently perhaps, that he could teach her minister his A B C of religion.

one correspondent says, he went not to that bourne by the way of the church.

Yet he was not a Christian, if a belief in the miraculous birth and acts of the divine Founder of the religion of love be necessary to justify one in assuming this epithet. The miracles, as such, were to him no proof of a divine mission. Nay, truth compels me to say, that they were an absolute stumbling-block to him. They marred the holy beauty of Christ's character and life, instead of deepening Dr. Twitchell's reverence for that noble being. I say this in sorrow, and thrice happy are we who can look without difficulty through them or over them at the transcendent glories of that life of self-sacrifice. Probably these views may have tended to prevent his attendance upon the worship of any church made by man. His church was the temple of all nature, and his hours of worship were while on his rides on professional business for the relief of humanity. "How can any one help adoring," he said once to a near friend, "if he will ride as I do some early morning, and see the break of day over Monadnock? I observe the first faintest trace of light, and watch its gradual increase until the full burst of the sun over the highest peak brings to me the idea of a God. People lose half the beauty of their lives by not being up to enjoy such scenes." It was fitting that such a man should have been born at the base of the mountain of the Great Spirit. It was under its benign influences, exerted upon him from earliest years, that he learned to enjoy that hill-side species of worship, belonging to "absolute

religion" alone, to which I alluded in the earlier part of this memoir, and which, growing with his increasing years, became at last one of the strongest elements of his character. "But he did not believe as we do," cries the bigot. Be it so. I grant that his speculative faith differed from that usually held sacred by Christians of the present day. But did he not act out in common life the principles of Jesus? And how can any one doubt his practical belief in those principles, when we see him daily going about doing good? His profession was not a mere money-making trade, but a noble art, which he wielded in the service of humanity. His religion, like that of Abou Ben Adhem's in Eastern poetry, consisted more in acts of practical good-will to man than in talk of his love to God. All ages were attracted to him. To the little children gathered around him upon the door-step, he told pleasant tales, and they loved him; the middle-aged, when in joy or sorrow, found a sympathizing chord in his heart; the sick and aged relied upon his visits and his conversations, ever pure and hopeful, for the support of their souls. To none did his religion ever bring aught inconsistent with temperance, justice, and truth. Surely, if he be not worthy of the Christian name, I pray Heaven we may have many more such men among us Christians; and I feel certain, that, in so saying, I express a thought which will be warmly reciprocated by all who knew and duly appreciated him.

CHAPTER VIII.

FROM 1843 TO 1850. — ÆT. 67—69.

My own Acquaintance. — Personal Appearance. — Conversations. — Instinct and Reason. — Medical Chemistry. — Cure of Himself by Strict Diet. — Account of his Cases dictated to me by Himself. — Jocose Man. — Anecdote of old "Bucephalus." — My delightful Reminiscences of him. — Last Illness and Death.

I REMEMBER well the first time I met Dr. Twitchell. It was in the spring of 1846, and I had just alighted from the cars at Keene. I had no thought of meeting him, as I was at that time unaware of his habit of resorting to the station-house on the arrival of the cars. I had, however, long known him as the great surgeon of the three Northern or Eastern States. I glanced around, and was struck with the appearance of one man. I said immediately, "That must be Dr. Twitchell. Two such heads cannot be found in one New England village." Subsequently, I found that my *diagnosis* had been correct. He was a man somewhat beyond the noon of life. He moved about actively, but with a semi-shuffling gait. He was below the medium height, of a large and farmer-like figure, which was awkwardly set off by an old-fashioned blue coat that hung loosely upon his body. He looked at me with that quiet, searching glance habitual to him. His massive

head, half covered as it was with a hat that had seen many summers, gave instant evidence of its intellectual power. The traces of a benevolent heart, which flitted occasionally over the face, confirmed my opinion that he was no other than Twitchell. His eye I never shall forget. It was small, gray, and mildly piercing, yet modest and retiring; and, though half hidden under its thick, shaggy brows, I *felt*, by its very depth, the intensity of his gaze. Soon after this, I became personally acquainted with him; and we had many conversations, profitable to myself, during that visit and at subsequent periods.

Among these conversations, I may quite cursorily allude to the following: A discussion had arisen among a party, while seated around his own tea-table, on the difference between instinct in animals and reason in man. Some of the company limited the possession of reason to man, and were equally disposed to deny instinct to him. Dr. Twitchell's face lighted up as he took the opposite view. The young of man and of all animals seek *instinctively* their nourishment. Instinct, therefore, belongs to man with the lower animals. But Dr. Twitchell was too old a horseman not to know that reasoning powers existed in his favorite beast. He cited instances of memory and reflection that he had seen in the lower animals. Modern science, I believe, fully confirms his views. If you take the young star-fish from its parent, and put it on the opposite side of the vessel, the mother will shortly seek her child, and take it again under her maternal charge. You may call this instinct or reason as you please. To an unpre-

judiced mind, however, it seems marvellously like the process by which a human mother would seek her lost offspring. Dr. Twitchell never would consent to the elevation of man by a degradation of the brutes.

In medical chemistry he was much interested. He believed that upon this subject the dawn was but just opening on medicine, and that to medical chemistry would be due some of the grandest triumphs of the profession in future times. On one occasion he said to me, "If I were a young man, I would devote myself thoroughly to animal chemistry. I would analyze the blood and every organ in the human body while in health. Having done this, I would repeat the same processes upon man in a diseased state." These views, I am well aware, are very different from those held by the body of the medical profession. In fact, too many physicians seem to regard practical chemistry as of no importance to a medical man. But how many curious and complex processes are daily carried on by chemical laws in the human frame! Dr. Twitchell believed that here was a great field for the energy of the young scientific physician to display itself in the path of discovery. My own opinion coincides with Dr. Twitchell's; but it seems to me that the only way by which a general elevation of the profession on this point can be attained is by means of the various medical schools of the country. Practical chemistry should be taught in every school as practical anatomy is taught, not merely by lectures, but by actual demonstrations.

One of the principal subjects of our conversation was his own recovery from an apparently malignant disease, by means of diet alone. I was astonished at that history; and as he was kind enough to enter into full details on the subject, I will relate it here, very nearly as it was printed in the "Charleston (S.C.) Medical Journal."* It will give the reader an idea of the surpassing power which he had over his own appetites, while it affords an illustration of the influence which simple diet has over the human frame. The history is as follows:—

"1. Cancer had appeared in his family. His grandmother died of cancer of the breast; his sister, of that of the stomach. These are all the data of his hereditary tendencies that bear upon our main topic.

"2. In very early life, Dr. Twitchell was in delicate health. As a youth, he was stronger, and was among the foremost in all athletic sports. While at college, he became dyspeptic, had jaundice, &c.; subsequently, he passed gall-stones. Whilst pursuing the studies of his profession, he began to suffer from asthma; and, for about twenty years, was very much subject to violent attacks of it, causing him during the winter to sit up in bed half of every night. During all this period he ate animal food very freely, three times every day, and digested it with ease; whereas vegetable food caused dyspeptic difficulties. Being induced, owing to a severe eruption of the face, to abandon this course, he gave up, for *nine* years, the use of meat. After some months, his face was cured; and, from the period at which he first abandoned meat, he never had an attack of asthma; and

* The Charleston Medical Journal and Review, Nov. 1849.

Dr. Twitchell considers these two facts related to each other as cause and effect. Moreover, vegetable food was soon easily borne. After the nine years of vegetable regimen, he began gradually to resume the milder kinds of animal food, such as poultry and somewhat of the more solid meats, until two years since (1847), when he commenced the very rigid diet, to be described when treating of the local disease which is the more immediate object of this paper. Finally, I will state, as indicative perhaps of the tendencies of the cutaneous system to morbid action, that about four years ago he had a papular eruption lasting six weeks; and, likewise, that very many years ago he had a wart-like tumor on the scalp, which disappeared under the use of creosote, externally applied.

"3. The local disease, the course and result of which I present as the chief object of interest, commenced eight or ten years since, as a small but hard tumor at the internal angle of the right eye. When first noticed, it was about as large as a mustard-seed, and not painful. He occasionally touched it, and had some suspicion that it might eventually prove to be of a malignant character. It was imbedded in the substance of the skin, and from the first seemed very slowly to augment in size. At times he *thought* he felt some lancinating pains in it, which radiated to the brow. It did not, however, interfere with the functions of the lachrymal ducts, &c. About 1843, the tumor had become nearly as large as a pea, and a tendency to the formation of a scab was observed. He was then induced to try some local applications, and frequently, until 1845, used Jennings's ointment.* This would remove the scab, and display three small lobes, from which exuded a little purulent fluid. At first, the morbid growth seemed lessened by this and other milder

* Mackenzie on the Eye.

applications; but no permanent effect was produced. At times the discharge ceased, but only to return again, and the tumor gradually lost its trilobed aspect. It was at this period quite conspicuous to every bystander.

"August, 1845, Dr. George Hayward, of this city, removed it with the scalpel. For a short time, the wound seemed doing well; but, finally, it did not heal, and two months afterwards it was operated on again, and nitrate of silver was applied. Meanwhile, however, much local pain had been experienced. It was deeper seated, less transitory, and radiated towards the brow and cheek. Sometimes it was severe enough to awaken him at night, and was worse usually after long journeys.

"The applications during 1846–7 were chiefly of a very similar character, — cold cream, preparations of zinc, &c. and once the iodide of lead. All active applications caused inflammation of the eye. The tumor continued to augment slightly, and in the spring of 1847 it presented to my eye a decidedly malignant appearance. It was an ulcer, about the size of the top of the finger, with ragged, hard, elevated edges; and the irritation from the discharge caused the patient frequently to apply his handkerchief to the part. At night it caused a gluing of the lids, and a discharge at the side of the nose. I certainly believed, and Dr. Twitchell tells me that he thought, at the time, that the disease would gradually augment, and involve the eye; and he had determined, if necessary, to have this organ extirpated. His general health, as it has been already stated, continued good; but, when not actively employed, the mind was somewhat depressed at the prospect before him. At the meeting of the American Medical Association in Philadelphia, May, 1847, he consulted several of the eminent men whom he met; and I believe, I may say, that all regarded it as a disease of a

most serious nature, although some thought it might be cured by local applications, and others advised a further operation.

"Dr. Twitchell returned home discouraged, and he decided to give up all use of medicines internally or of external applications, but to try a course of the most rigid diet. Starting from a theory that malignant diseases arise from the fact that we take too much carbon into our systems, he determined to live from that time upon a bread-and-milk diet; and if, at the end of some months, he did not find any diminution in the disease, he intended to use nothing but bread and water. After his return from Philadelphia, he adhered strictly to the bread and milk. He used three times daily from four to six ounces of cream, or the richest milk, and same quantity of either white or brown bread. He continues that diet still (1849).

"The results upon the *local disease* were the following: The pains in the part were lessened almost immediately. The purulent discharge very soon began to diminish, and in two or three months it was evident that the disease was not augmenting. During the following winter, the improvement was more decided. In the spring of 1848, being obliged to ride over dusty roads to great distances, the eye was more irritated. Nevertheless, he felt, and his friends assured him, that the diseased part was really lessening, and tending towards a cure. After that period, a steady improvement took place. The ulcerated mass, which was so perceptible to me two years since, has wholly gone; and now (August, 1849) I can discover no difference between the angles of the two eyes, save that in the right one there is a minute white spot, about a line in diameter, looking like a scar. It is not harder than the adjacent parts; and, had I not known of the existence

of previous disease, I should not have noticed even this. There is no discharge, no pain; and a perfect cure seems to have been accomplished of a disease that had been existing for about ten years, in a patient aged sixty-eight years.

"The effects of this rigid diet upon the constitution, as a whole, are interesting.

"Respecting his mental condition, Dr. Twitchell thinks he has been much less irritable than when he was *omnivorous*.

"He had, at one time, an attack of vertigo (to which, however, he has been always liable); and, finding that he was *growing corpulent* under the diet, he for a time took less of it.

"He has always been as strong as when indulging in a more generous diet.

"He has been able to breathe better.

"His digestion has been good, but with a slight tendency to costiveness.

"His organs of circulation have been unaffected.

"Renal excretion, for years a little disturbed, as is not unfrequently the case in persons of his age.

"Finally, Dr. Twitchell presents, to my mind, the picture of a hale, robust man, in perfect health, so far as one can perceive, and but slightly touched by the influence of his many years of honorable and successful labor.

"*Reflections upon Dr. Twitchell's Case.* — 1. The most important topic involved in the foregoing record is the restoration to health from what seemed to be malignant disease, and that this result followed the strict diet of bread and milk for two years.

"2. The cessation of asthmatic difficulties, after they had troubled the patient for twenty years, and that this cure likewise followed the change of diet, — from an

almost strictly animal diet to one quite the reverse, viz. strictly vegetable.

"3. Some readers may ask, if these two cures are not merely examples of the *post hoc;* and they may deny that there is any complete evidence of the *propter hoc.* I consent to the doubt, for it has entered my own mind. Nevertheless, if mere coincidences, they are pregnant with important suggestions. I confess that, in my own practice, I have never met with any cases so significant of the power which diet, simply and heroically used, has to *re-organize* a man.

"4. Dr. Twitchell's case becomes interesting as an evidence of the power of a man to subject his body to strict rule. In this epicurean age, it is quite refreshing to find one who 'eats to live, and does not live to eat.' A worthy professional brother, of this city, said, when the case was related to him, 'It might certainly be a question whether life were desirable under such a regimen!' I honor a hero wherever I find him; and the heroism of Dr. Twitchell, in undertaking and pursuing this course so long, merely in consequence of a theory,* excites in me the greatest delight. In this sceptical, unbelieving era, I delight to see any one having *faith.* Whether the theory was correct or not, it matters little: the fixed will of its follower arouses my enthusiasm; and this brings me to another topic of interest.†

"5. The theory which governed Dr. Twitchell — was it correct? I confess that I am unable to solve the ques-

* That Dr. Twitchell was not influenced wholly by theory, the additional case, which I have presented below, will prove.

† One of my correspondents says, "When Dr. Twitchell had prescribed for himself a certain course of diet, it was no unmeaning remark; but, with a deep sense of religious duty, he kept to it without swerving in any degree."

tion; I merely suggest it. Some, whom I consider as our ablest animal chemists, think it was by the process of starvation, as described by Liebig,* that the cure was wrought. It seems to me that this cannot be the true explanation, — for Dr. Twitchell has always been stout; and it will be remembered that at one time he actually gained flesh under the diet."

The above account I published in the "Charleston Journal." It was subsequently printed in the "Boston Medical and Surgical Journal;" and appended to the article was the case of a man, the result of which probably had much influence towards inducing Dr. Twitchell to undertake his dietetic course. Dr. W. H. Thayer, in a letter to me, says: —

"I have obtained from Dr. Twitchell all the particulars of the case of treatment of osteo-sarcoma (cancer), which he could give me; and, as his memory is so accurate, I suppose he has not forgotten any thing of importance connected with it. You know the doctor never takes notes.

"A man about forty years of age consulted Dr. Twitchell, in relation to a tumor on his scapula (shoulder blade), as large as a pint bowl. It was evidently osteo-sarcoma, had its usual crackling feel, and resembled very closely one in the same position which Dr. Twitchell had seen a short time previously, and for which he had removed the whole upper extremity, even scapula and clavicle (collar-bone). In that case, the wound healed; but the man died a year or two afterwards, with carcinoma of some internal organ. When the second case applied for advice, Dr. Twitchell declined an operation, and the man returned home to Vermont. Soon after-

† Animal Chemistry, Cambridge edition, page 25; 1842.

wards, he heard of somebody in New York who could cure him, and, applying to this person for advice, received the following: —

"He was to take from the brook which ran through his native farm a plant which grew there (the adviser did not know what it would be), and use a weak infusion of it for his only drink every day until the tumor had disappeared. *His diet, besides this, was to consist of bread alone.* This advice was strictly followed; the plant he used was 'water dock.' Dr. Twitchell happened to see the man two years afterwards, when he was still following this course. He found the tumor had nearly disappeared, there being apparently only a trifling thickening of the skin."

These two histories must be deeply interesting to all. Presenting as they do the evidence of the powerful influences of diet upon the well-being of man, they are of great importance. I should not wish, however, to make the inference which some may be disposed to draw, that they prove the propriety of an almost strictly vegetable diet for all. They simply suggest that a long-continued, mild, and spare diet may cure, when other remedies are of no avail. I am likewise well aware, that, under the modern revelations given by the microscope in regard to the nature of tumors, some may doubt as to the malignant character of Dr. Twitchell's disease. Whether it be malignant or not, I am satisfied of the truth of the following proposition: Dr. Twitchell had a disease thought to be of a malignant character by the most eminent of the profession, one of whom had once extirpated it; it had continued to augment for eight

years in spite of local treatment; and, finally, under a strict diet, it began soon to lessen in severity, and, after a gradual improvement for a year, was wholly cured.

Some of my most vivid reminiscences of Dr. Twitchell are as a jocose man. Had he been less devoted to temperance than he was, he would have been distinguished as a boon companion, and would have enjoyed himself over a foaming mug of ale as much as Burns ever did over the punch-bowl of "the illustrious lord of Laggan's many hills,"* or during those hours of exquisite delight which he experienced from his newly-found literary fame at Edinburgh. Dr. Twitchell possessed all the boisterous joviality of Burns, without the "thoughtless follies" which "laid low" the Scottish bard.

On one occasion, he slily tried to make himself merry at the expense of myself and several friends, who were taking tea at his house. With great soberness he informed us of a certain fact, which seemed at a first glance very peculiar; but which, after a moment's thought, was perfectly plain. I think, however, he hardly enjoyed the puzzle of the company so much as he did the immediate discovery, by one of us, of the attempted cheat. His laugh was contagious. It was not one of your simple smiles, a spasmodic twist of one or two muscles

* "Here are we met, three merry boys;
Three merry boys, I trow, are we;
And mony a night we've merry been,
And mony mae we hope to be!"
Allan Cunningham's Edition of Burns, vol. iv. p. 169.

about the face, but a real, substantial, *embodied* laugh. He was not a man to do things by halves; and his laugh was contagious from its very *universality*. A story never lost any thing with the various editions he gave of it. They were numberless, and he entered with equal zest into their relation with every new-comer. The following is more than a "thrice-told tale;" but it is so characteristic of him, and it will bring him up to so many minds, that I cannot forbear telling it, although it would be impossible to give even the faintest idea of his manner of relating it. I have already alluded to his humanity towards animals. It was especially manifested to one of his old horses, who had become almost worn out in his service. It was so great that he would not allow the animal to be sold or killed. This creature had been a noble beast in its youth, and was possessed of an unusual degree of intelligence. At the time at which the following incident occurred, and in which he and his old master figured as the two chief characters, he was shorn of his early powers. He was old and decrepit; he did no work; but, day after day, having received his wonted allowance of grain at the good doctor's stable, would wander forth to snuff the air, and to browse in the main street of Keene. Everybody knew him, and his virtues were descanted upon by the villagers, as he quietly and with difficulty moved along. It was a fair morning of a court-day. All the purlieus of the taverns were occupied by groups of visitors from the neighboring towns, who had come in to attend at the regularly returning *festival* of litigation that we

Christians hold in all our shire towns. Dr. Twitchell, as usual, was out among the crowd, talking, joking, arguing with the bystanders. The old horse, too, made his appearance, and very soon became unconsciously the "observed of all observers," as he daintily picked here and there a choice bit. One of the numerous parties began to discuss his merits; and it appears that the undue warmth of some earnest friend caused others to doubt whether, after all, he had ever been much of an animal. It so happened that one of the backbiters was a man upon whom suspicion had fallen by no means creditable to his fame. A trial was at hand, in which he was to appear as defendant. As the discussion grew warmer, Dr. Twitchell approached, and the following dialogue took place: —

Stranger: "Doctor, we have been talking about your horse, and some here are disposed to doubt about his good qualities."

"Ah!" says the doctor, "whoever may doubt his excellent qualities, I assure you, gentlemen, that he is the most intelligent horse I ever saw. Why," continued he, glancing at the person above alluded to, "he can tell, at any time, the difference between a rogue and an honest man. For instance now, if our friend here is guilty of the charge he is accused of, my horse will recognize it in his face, and will fly at him and give tokens that he considers him a scoundrel; and, if *my horse* decides against him, I shall want *no jury* to act upon the question. Whatever others may think, *I* shall be wholly satisfied."

A long and loud laugh at the remark arose from

the bystanders. "You may laugh, if you please," quietly continued the doctor; "but I will prove the fact to you, if you choose to try. Now Mr. ——, and you, Mr. ——, may go up and speak to him, and he will receive you pleasantly, and will take your caresses with becoming modesty. Everybody knows you are honest men. But, as for our friend here, I tell him to beware of going even within sight of the animal, unless he feels perfectly innocent in his own heart." "Pooh!" interrupted the defendant, "it is all nonsense. Your horse can hardly walk; but I suppose he is a surly old beast, and will bite any one." "By no means," replied the doctor; and, again addressing himself to the other bystanders, he said, "Gentlemen, I beg of you to go up, and see how kindly he will treat *you;* but (turning again to the man) beware how you try it, unless you are innocent." Upon this, two or three of the party walked towards the old creature, who received them with a quiet lack-lustre eye, and a manner which seemed to indicate that he felt he was receiving nothing more than his due, namely, the respect of all honorable men. "Well," perseveringly cried the doctor, "are not you going to try to prove your innocence by the same test?" "I am not afraid of the beast," ejaculated the man, and moved boldly forth towards him. The doctor stepped quickly and quietly behind him; and, as they came nearer the animal, raised his forefinger far above the head of this victim of his love of joking, and pointed it towards his old Bucephalus. What a change has come over the spirit of the dumb

beast! He raises his head, his eyes glance with their ancient fires, his neck is stretched forth apparently with intense indignation, while, with distended nostrils, open mouth, and gnashing teeth, he is rushing towards the culprit! The man retreated precipitately; the doctor dropped his finger, and took his place in the crowd; and the horse, having apparently driven off an intruder, quietly resumed his grazing. "There," says the doctor, "it is of no use to go to a jury: *I* am satisfied. My horse has decided the question." And, amid uproarious laughter, and much inward chuckling, I doubt not, on the part of the doctor, he retired, leaving his opponent wholly discomfited, and unable to unravel what to him was a perfect mystery. He did not learn, until years afterwards, that the horse had been taught by Dr. Twitchell's students, in his earlier days, to run at *any one* who should point his forefinger at him, as Twitchell did on this occasion.*

This practical joke is a sample of our friend. No one ever enjoyed such a scene more than he.

I have thus glanced at some of his characteristics, as I saw them in my various interviews with him. And now, as I review his many excellent qualities, his native golden intellect, unpolished though it may have been by the deepest study or highest art, his noble love of truth, his hatred of all pretence, his ten-

* Dr. Twitchell was unwilling to sell this old and faithful animal; so that at last the poor creature became so decrepit, that, if he once lay down, he could not arise without assistance. Others finally gave orders for his death, out of pure pity for his infirmities. But his master is said to have wept on hearing of his fate.

derness of heart, his versatility of genius as manifested in his profession, while a genuine spirit of mirth shed over them its mild and beautiful lustre, — when I think of all these, I feel an esteem and love for his great spirit which no words can convey, and I shall ever remember the hours passed with him as some of the choicest of my life.

From the spring of 1842, Dr. Twitchell had been more or less troubled with a disease not unfrequent in aged persons; and, a few months before his death, some diabetic symptoms appeared. The appetite failed, and his tongue became dry. On Sunday, May 19, 1850, he had some nausea, which was, however, soon relieved. He continued in bed during the day, with his mind bright and cheerful; his thoughts and conversation running chiefly upon his early days.

On Monday he was better, and went down stairs, though weak and faint. He spoke of his will, and seemed to anticipate that his last hours were drawing near. On Monday night, his friend, who slept in the adjacent room, spoke to him soon after midnight; and he said that he had passed a good night. Soon afterwards he arose from bed. He stretched out his arm to take a cup from the table, and succeeded in grasping it; but instantly it fell and broke. He was paralyzed on one side of the body, and became unable to speak or move. He lay partially reclining upon the bed until assistance arrived. His mind still seemed perfectly clear, and closely attentive to his own symptoms. He had no pain, and referred to cases similar to his own, in which certain treatments

had been successful. From this time until the following Sunday, when he died, he continued in the same tranquil state. On the third day, he asked for his purse, and took from it some sums of money, giving them as remembrances to the domestics of his family. Many times he desired to have some young children who were in the house brought near to his bed; and, on these occasions, always wished they should kiss him. Resting upon his pure thoughts and his good life, he was quietly passing away; and, by his beautiful serenity, was instilling into the hearts of the loved ones around him lofty views of human life and of human death. Consistently with all his former course, he asked for no vocal prayers to be uttered by his bedside. He felt not the need of any human mediator between himself and his God. His whole life had been one of prayer and of thanksgiving, and his death was about to be to that life its crowning grace of resignation to the almighty will of Heaven. On Sunday, his voice failed him, and his power of swallowing was gone. He afterwards made no vain efforts at conversation, though capable of recognizing the children, who were still allowed to climb upon his bedside. In the afternoon, that holy unconsciousness, that sweet sleep, which precedes death, came over him. A few gasps, a little rattling, and the great soul had departed. As he had always desired, he was preserved from long illness. It was amid the deep stillness of a Sabbath evening that he died.

In one of the finest of Beethoven's sonatas is a portion entitled a "Funeral March on the Death of

a Hero." In the solemnity of its pathos, in the holy thoughts it inspires, it seems no mortal hymn, but, with a seraph's power, transports us far above the little transitory existence of this earth into the realms of immortal life. There we see, as with a prophet's eye, the souls of the noble of our race, who have preceded us from earliest times, coming forward to meet the brother-spirit of a great mortal, who, newly transfigured, has just left the earth. As the music slowly wells up, we seem to hear from afar the mystic choral hymn, and even the measured movement of the spirits. All countenances beam with the calmness of truth and of love. Not a ray of sadness flits across the brow of any of the heavenly host. The music ceases, but its hopeful influences still cling around us. Thoughts entirely similar to these, suggested by the Miltonic strains of the divine composer, arise in my mind as I stand by the deathbed of any wise and good man, — some hero of our race. He seems to have left us merely to join the hosts of the great dead; and, on such an occasion, sorrow appears to me sacrilege and impiety. Need I say that such have been my most vivid thoughts, while reviewing the active and true life, with the tranquil end, of the strong-minded Twitchell? May we not all reverently hope, that, even now, he is holding communion with the glorious ones who in past ages have gone down like him honored to their graves!

CHAPTER IX.

Conclusion. — Outlines of Dr. Twitchell's Character.

Dr. Twitchell was no shadow of another, nor the exponent of any set of opinions, but a living specimen of what a great, self-relying mortal may become. In summing up his character, I recognize that of a man possessed of infinite humor, of a strong, vigorous intellect, and a reverence for truth in speech and act, which, while it made him always ready to acknowledge his own errors, likewise aroused his indignation against hypocrisy and pretence wherever seen. Joined to these traits, and in beautiful harmony with them, was his warm heart. Ardent in his attachment to friends through every stage of life, and wisely benevolent to those less closely united to him, he went about daily doing good. "Like the sun," says one of my correspondents, "he poured forth of his abundance, and sought no return." "His great nature," says another, "had all the elements of justice, truth, and integrity, love and tenderness, though perhaps not in all respects refined, compounded, and harmonized, so as to realize the

perfect man, as in how very few even of the most sincere Christians they are. But, in the robust vigor and straightforwardness of his life, and in the melting sympathy of his heart in sickness and trial; in his tender domestic affections, and in his early and long-tried efforts in the cause of temperance, none could fail to see the essential good man, by whatever name called."

In confirmation of my views of Dr. Twitchell's intellectual power, I will quote from the opinion of one who perhaps is as good a judge of purely intellectual greatness as this or any other country can present. Daniel Webster, in the letter already quoted,* writes thus: "Dr. Twitchell and myself were members of Dartmouth College at the same time, and I have known much of him since, as in the earlier part of my professional practice my duties often called me to the place of his residence. From first to last, I have entertained for him the highest respect and most cordial esteem. His mind was remarkable for strength, vigor, and originality, and much given to deep and profound thinking;" and again he writes, "I should have looked to Dr. Twitchell, as soon as to almost any other man, for whatever could be accomplished by intellectual energy and application."

Standing pre-eminent among his fellows of the medical profession, no one can accuse him of an illiberal or unjust course. Autocrat in surgery for all the country round, he was, on all occasions, very friendly to those younger than himself. He helped

* Page 16.

them onwards, and they all loved him as a father. Cordial, though commanding, with those who were his equals in years, he gained their respect for his perfect fairness. Without formality or pretence, his professional skill seemed to the uninitiated like intuition. He said little, but was prompt in his decisions, from which he never swerved; he was energetic and thorough in the performance of what he determined to do. Never appalled by unforeseen circumstances, he always had an expedient ready for the occasion. Hence he has been called "a man of expedients." It has been well said that he would have made a good general, had a military life been his choice, instead of the more quiet paths of professional duties; for "he was secret in counsel, prompt and overwhelming in execution." He was unable, from his excessive bodily toil and his long excursions, to keep up with the medical literature of the day. But, by means of his keen perceptive faculties and power of concentrating his whole mind rapidly on a subject, he contrived to get at the essentials of every valuable improvement; and, at times, the quickness of his apprehension and the vigor of his judgment, combined with his extraordinary memory and practical common sense, supplied the defects in his knowledge of what had been done by others in the particular subject on which he happened to be engaged. As an operator, he was bold, yet cautious; and he never forgot that mere manual dexterity is but a small element in the requisites for a great surgeon.

He has left no permanent monument of his fame

in the form of a written book. His memory will be kept green by all his contemporaries; but their children's children will know of him only by the traditions which the people will hand down of his powers as the great surgeon and well-beloved physician of the North. How much do I regret that he had no Boswell by his side during life; no one to report his "Table Talk"! A few transitory papers alone remain to mark the labors of his life; but the seeds that he has planted in many minds will arise, and, all-unconscious of their origin, bring forth fruit. For us his light is now for ever set. The twilight of sweet memories will, however, long gild his grave; and the secret moaning of thousands of human hearts will be his appropriate requiem.

APPENDIX.

APPENDIX A.

The following is the translation of the Greek oration referred to on page 24 of the Memoir. It is the unfinished production of a youth not accustomed to the expression of his thoughts in any written form. It is printed because it illustrates in some degree his philosophical turn of mind.

THE INFLUENCE OF NATURAL OBJECTS UPON THE MIND.

Happy the man who follows the lessons which nature continually dictates! What a striking similarity do we behold between the natural face of a country and the mental abilities of its inhabitants! Whence it appears that the genius and understanding of men are greatly affected by natural objects. If we look at the Arabs, surrounded by scorching sands and fanned by poisonous winds, what are their abilities, and what their manners? Surely they are a complete emblem of the country which they inhabit. The barren sand represents their minds, and the rugged mountains their manners. And thus, wherever nature has been parsimonious of her gifts to the earth, there we observe a deficiency in the minds of the inhabitants.

But why need we thus labor to show this correspondence? We may affirm, that, from natural objects, we derive all our knowledge, and consequently all our happiness.

By the medium of our senses, they stimulate our minds to action, which otherwise would be entirely dormant. They lay the sole foundation of all morality, leading us to contemplate their Author; and they are the source of all our enjoyments.

On whatever part of creation we turn our eyes, we everywhere find something which interests either our senses, our imagination, or our reason. Our love of variety is constantly excited, and constantly gratified. There is no part of the day which does not afford us pleasures both for our senses and for our minds. While the sun illuminates our horizon, the plants, the animals, and a thousand other agreeable objects, strike our eyes; and, when night spreads its veil, the majesty of the sky transports and charms us. On every side, nature labors to surprise us with new pleasures. Even the smallest worm, a grain of sand, presents us with objects of admiration, pleasure, and improvement.

Those pleasures which are only the work of our own imagination are transitory and vanish like a dream, the charms and illusions of which are lost on the moment of waking. But the pleasures which we derive from the contemplation of the works of nature are solid and lasting, because they open to us an inexhaustible source of new delights. The God of nature seems to have had in view the happiness of his creature man, in the erection of all his works. Behold! he has clothed the earth with a lively green color, which is the most mild, and pleasing to the sight; he has accommodated us with an atmosphere fit for the respiration of animals, and continually supplies its expenditures by exhalations from vegetables. As the contemplation of these objects promotes civilization, and civilization makes mankind capable of receiving more pleasure from the beauties of nature; as we advance in the path of science,

we are enabled to observe a greater number of connections, dependencies, and relations among the objects of nature, the beauty and harmony of which impress our minds with agreeable ideas, and give us a more just conception of their Author than we otherwise should have.

How stupid must that man be who does not receive lessons of morality from the display of such wisdom, power, and goodness as is manifested in all the work of creation! They naturally lead us to inquire, To whom do we owe these numerous and varied gifts of nature? Who is he who provides for our wants and pleasures with such goodness and munificence? Let us ask it of all nature! The hills and valleys will tell us; the earth points him to our sight; the sky is a mirror in which we may behold him; the storms and tempests proclaim him; the voice of thunder, the rainbow, and snow declare his wisdom and goodness! And all the numerous host of animals, which are the inhabitants of the air, the earth, and the sea, declare the glory of the Almighty, and proclaim his existence. Those rich lands where our flocks graze; those forests which afford us shade and fuel, and a vast multitude of divine gifts, invite us to grateful joy. It is thus that nature becomes an admirable lesson for the heart. If we listen to it, we shall know the true wisdom which leads to happiness. We shall find that there is no satisfaction more sincere or more lasting, or more conformable to human nature, than the pleasures which are afforded by the contemplation of the works of nature.

APPENDIX B.

LIGATURE OF THE COMMON CAROTID ARTERY,

AS PERFORMED BY DR. TWITCHELL IN 1807.

During a mock-fight, at a regimental review in Temple, in New Hampshire, on the 8th October, 1807, John Taggart, of Sharon, a cavalry soldier, æt. twenty years, received a wound (supposed to have been caused by the wadding and burning powder from a pistol discharged near him) on the right side of the neck and face, extending from behind obliquely forward into the mouth.* He was immediately conveyed to a public-house, where, at the request of Dr. Crombie, then surgeon to the regiment, I assisted in the examination and dressing of the wound, and subsequently took charge of the case. We found the whole of the right side of the head, face, and neck, very much burned; and a large wound penetrating the pharynx and mouth, by which were destroyed, or greatly lacerated, nearly the whole of the parotid gland, the temporal, masseter, and pterygoid muscles; and also parts of the muscles on the anterior part of the neck between the inferior maxillary bone and the os hyoides. The angle, ramus and coronoid process of the inferior maxillary bone, and the pterygoid process of the sphenoid

* The treatment of this case is discussed in the Memoir. See pages 63—73.

bone, were shattered; and that part of the superior maxillary bone which covers the antrum Highmorianum was so broken, that the finger could be readily introduced into the cavity; the right side of the tongue was also somewhat lacerated. Although the external carotid artery and its branches had been divided, yet, at the time of the injury, the hemorrhage was not copious. All the fragments of bone which were so situated that they could be extracted without much difficulty were removed; simple dressings applied to the wound; the patient was put to bed, and an anodyne draught administered.

Oct. 9. — The patient had rested but little; there was a good deal of arterial excitement; and so much inflammation and swelling of the throat and fauces, that he was unable to swallow or to articulate intelligibly. His respiration was somewhat impeded; his face very much swollen; and he had great pain in the head. I directed V. S. ʒ xx.; an evaporating lotion to be applied to the head and face; and a cathartic enema to be administered, which procured two or three dejections. These remedies appeared to give some relief for a few hours; but, in the evening, the excitement and pain increased. Ten or twelve ounces more of blood were taken; the lotion to the head and face was directed to be continued; and an emollient poultice to be applied to the wound.

Oct. 10. — The patient had slept some during the night; the pain and swelling were diminished; and, with much difficulty, he swallowed a little cold water, though a part of it escaped from the wound in the attempt. The local applications were directed to be continued; a teaspoonful of a solution of borate of soda to be put into the mouth every half-hour; and a little gruel to be given if he could swallow it. In the afternoon he was removed to his father's house in Sharon, a distance of eight or

nine miles, without any unfavorable symptom being developed. A cathartic of magnes. sulph. was ordered to be taken as soon as practicable.

Oct. 12. — The inflammation, pain, and swelling were much diminished. Pulse 70—80, soft. He could articulate more distinctly, and the deglutition was improved; though, in the attempt to swallow liquids, a part still escaped through the wound. Suppuration had commenced; and the dead parts were beginning to separate. The posterior upper tooth of the side affected appeared in the wound, and was removed. The magn. sulph. had procured three or four dejections. The emollient poultices were continued; and he got a little broth.

Oct. 14. — Suppuration copious; some portions of the dead parts had become detached, and were removed; and some fragments of bone came away.

Oct. 16. — Since the last visit, the disorganized parts had very much separated; and the coronoid process, angle and ramus of the inferior maxillary bone, as far as the posterior molar tooth, had now been removed. The patient could sleep quietly, and could take as much food as was necessary. I discontinued the poultice, and directed simple cerate spread on pledgets of lint to be applied.

Oct. 18. — (Ten days after injury.) The wound had now become cleared of all dead portions of muscle and cellular membrane, and presented a large circular aperture from two to three inches in diameter; at the bottom of which might be distinctly seen the internal carotid artery denuded from near the bifurcation of the common trunk, to where it forms a curve to enter the canal in the petrous portion of the temporal bone. Directly upon this curve of the artery might be seen a dark speck, of a line or two in diameter, which seemed to be a dead portion of

cellular membrane adhering to the coats of the vessel. I carefully touched it with a probe; but, finding that it adhered, I desisted from the attempt to remove it, and expressed to the patient and his friends my fears of a dangerous if not fatal hemorrhage when that should separate. I applied the usual dressings, left the room, and was about leaving the house, when some one of the family cried out that he was bleeding. I hastened back to his room, and found him deluged with blood. The dressings were immediately removed, and the blood jetted forcibly, in a large stream, to the distance of three or four feet. With the thumb of my left hand, I instantly compressed the artery against the base of the skull, and thus effectually controlled the hemorrhage. The patient had fainted; and fifteen or twenty minutes had elapsed before he was so much revived that I dared to make any attempt to secure the artery. Then, still keeping the thumb firmly pressed on the orifice, I proceeded to clear the wound from blood; and, having done this, I made an incision, with a scalpel, downward, along the course of the artery, to more than an inch below the point where the external branch was given off; which, as stated above, had been destroyed at the time of the injury. Having but one hand at liberty, I depended upon the mother of the patient to separate the sides of the wound; which she did, partly with a hook and occasionally with her fingers. At length, partly by careful dissection and partly by using my fingers and the handle of the scalpel, I succeeded in separating the artery from its attachments; and, passing my finger under it, I raised it up sufficiently for my assistant to pass a ligature round it. She tied it with a surgeon's knot, as I directed, at about half an inch below the bifurcation.

I removed my thumb and sponged away the blood, not doubting that the hemorrhage was effectually controlled. But, to my surprise and disappointment, the blood immediately began to ooze from the rupture in the artery; and in less than ten minutes it flowed with a pulsating jet. I compressed it again with my thumb, and began to despair of saving my patient. What further could I do? It was impossible to apply a ligature above the orifice: compression, then, was the only alternative. How was that to be effected? Should some one sit by the patient, and compress the artery constantly with the fingers till adhesion should take place? Possibly that might have been done; but I resolved to make another attempt first. Raising my thumb, I placed a small piece of dry sponge directly over the orifice in the artery; and, renewing the compression till a little larger piece of sponge could be prepared, I placed that upon the first; and so went on, pressing the gradually enlarged pieces obliquely upwards and backwards against the base of the skull, till I had filled the wound with a firm cone of sponge, the base of which projected two or three inches externally. Then I applied a linen roller in such a manner as to press firmly upon the sponge; passing it, in repeated turns, over the head, face, and neck. I directed that the patient should be placed in bed, with his head moderately raised, and that he should be kept as quiet as possible; and, as his pulse was very feeble, he having lost at that time between three and four pounds of blood by estimation, he was allowed a little wine and water, and occasionally some broth. We carefully watched him through the night; but no bleeding occurred, and he complained of but little pain.

Oct. 20. — (Forty-eight hours after the operation.) There had been no hemorrhage; and there was but little

excitement. Pulse 95 — regular. I directed the patient to take gruel and broth; and a little wine and water, if faint. This course was pursued till

Oct. 24, — when the bandage was removed and a fresh one applied, without disturbing the sponge.

Oct. 26. — The fetor arising from the accumulation of matter in the sponge had become so offensive as to nauseate the patient. I carefully removed several of the external pieces of sponge, washed the wound with a weak solution of potass. carb., substituted lint in the place of the sponge which had been removed, and applied the bandage as before.

Oct. 28. — All the sponge was removed, except a small piece directly on the artery; the wound was washed with a weak alkaline lotion; and pledgets of lint, spread with simple cerate, were applied.

Oct. 30. — The ligature on the carotid came away, and the wound was rapidly filling up with granulations.

Nov. 1. — The remaining piece of sponge was removed. The patient attempted, for the first time since the injury, to masticate his food; but the under jaw was drawn so much to the left that the teeth would not meet. To remedy this inconvenience, I caused an ingenious blacksmith in the neighborhood to make an instrument something like Hull's truss; one end of this being fitted to the top of the head, it was brought down, on the right side, under the chin; and the pad on the other end was made to press on the left side of the inferior maxillary bone. He wore this instrument most of the time during the remainder of the treatment; and it effectually answered the purpose.

Nov. 11. — The patient had very much improved. Several pieces of bone and a tooth had passed out from the wound, which was rapidly cicatrizing. There was

but little discharge of matter; he was able to move his lower jaw, and to masticate solid food with ease.

Dec. 30. — Some small fragments of bone, and a tooth from the upper jaw, had been cast off. The wound was completely cicatrized, and the parts consolidated. There was, however, some little deformity, in consequence of the depression on the right side of the face.

This case seemed to me at the time highly important and valuable; since it established surgical facts, which, as far as my knowledge extended, had not till then been known. The question of the practicability of the safe application of the ligature to the common carotid artery was, in my opinion, now solved. I had entertained that opinion for some time before; having repeatedly tied the vessels in dogs, and in one instance in a horse, without causing them much inconvenience; but, at that time, I had seen no account of its having been attempted on the human subject.

Sir Astley Cooper's claim of priority in the successful application of the ligature to the common carotid artery has been generally acknowledged. He performed the operation in June, 1808; eight months after the above operation. Sir Astley's case was undoubtedly the first published; but it appears from some recent publications, that Mr. Fleming, of the British navy, tied the vessel on the 17th October, 1803, for a servant on board ship who had attempted to commit suicide. The patient recovered. Mr. Fleming died abroad; and the case was first published by his assistant-surgeon, Dr. Coley, in January, 1817.

Of late, this operation has become very frequent, not to say fashionable, in this country at least; and in some cases, accounts of which have been published, I should think it had been performed unnecessarily. The case

related above, in my opinion, clearly demonstrates the inutility and consequent impropriety of tying the carotid artery for the purpose of preventing the growth of tumors about the head and neck, or as a step preparatory to the removal of such tumors by the knife. Although the common carotid had been tied, but a few moments only elapsed before the hemorrhage from above was so profuse as to require immediate and continued compression. If the circulation is so soon restored by anastomozing branches, of what use can the ligature be under such circumstances, or what prospect can it offer of preventing the growth of such tumors? Reason, and the experience of all practical surgeons, concur to show, that, whenever an arterial trunk is tied, or in any way obstructed, the circulation is promptly restored by anastomosis; else mortification would be the consequence.

APPENDIX C.

CASES OF MORBID ANATOMY.

Case I.

April 18, 1808.

Urinary Organs.

J. F. aged eighty-two, had for nearly twenty years past been attended with pain in the region of his kidneys, with painful micturition. His urine was very often turbid with blood, and sometimes the discharge from the bladder would for several days appear to be entirely blood, which was frequently voided in a coagulated state. He had resorted to various medicines for the relief of the above symptoms; but he scarcely received a temporary benefit from any. After death, permission was obtained to examine the viscera of the abdomen. The liver, spleen, pancreas, stomach, and intestines were severally attended to, but did not appear to be much diseased. The left kidney was next examined. The membrana adiposa was very much thickened and indurated; upon the removal of which, the proper coat of the kidney was discovered likewise to be in an indurated state. The body of the kidney was rather diminished in size, but completely filled with pus. The ureter and pelvis were enlarged to nearly three times their natural size.

Upon examining the right kidney, the membrana adiposa did not appear so much diseased as upon the other side, but was somewhat indurated upon its superior part. The substance of the kidney itself on this side had fallen a prey to disease, excepting a small portion of the cortical part on the convex side, which was the only remaining portion to be found. Attached to this part was a sack, which was judged to contain about half a pint of a fluid which had a resemblance to water turbid with blood. From this bladder issued the ureter, which was about three-fourths of an inch in diameter. Upon opening the before-mentioned bladder or sack, it appeared to be an enlargement of the pelvis and infundibula of the kidney. Some of the infundibula were still to be discovered attached to the remaining portion of the kidney, but so enlarged that some of them were an inch in diameter.

The urinary bladder was very much contracted, and filled with a substance resembling cheese-curd, or what is frequently observed in scrofulous glands. The muscular coat of the bladder was very much thickened.

Remarks. — The above appearances lead us to conclude, that the disease began in the first place in the urinary bladder, producing an obstruction to the discharge of urine from the right ureter, which became distended and very much enlarged; the distention and enlargement extending to the pelvis of the kidney. As this process advanced, the substance of the kidney became more and more compressed till it was in a great measure lost; being converted into a sack containing cells, which were the enlargement of the infundibula.

It has been remarked by writers, that the kidney will secrete urine when the natural structure is almost entirely lost. After this process had advanced considerably, it is probable that the left ureter became obstructed, that the

pelvis began to enlarge; but the pressure upon the kidney produced inflammation and suppuration. What should produce the first obstruction to the free passage of the urine into the bladder, it is difficult to tell. May it not have arisen from a scrofulous affection of the bladder?

Case II.

Hydrocephalus Internus.

In the month of December, 1807, a child of T. T. aged three months, was attacked with the hooping-cough. After a violent course of the disease, she appeared to recover so far, that the parents considered her well, excepting they observed "something singular," as they expressed it, in the appearance of her eyes. She frequently was observed to apply her hand to her head, and to cry in a moaning voice.

The first of May, 1808, she was troubled with diarrhœa, for which magnesia, &c. were prescribed, and appeared to check it.

May 5. — The child showed evident symptoms of the hydrocephalus internus. The fontanelle became very prominent and tense. An emetic was prescribed. 6th. The emetic has operated very powerfully, without mitigating the symptoms. Calomel and opium in small doses were now administered. 7th. Symptoms become violent. There is a strabismus of left eye. Medicine as yesterday, with addition of a cath. with calom. 8th. Much as yesterday; the skin has become very dry, especially in the palms of the hand; some sweating about the head. Tinct. of canth. was applied externally, particularly to the head and neck and spine. 9. She has had convulsions, and the urine is diminished in quantity. She

shrieks and cries upon being moved. A blister was applied to the back of the neck, and the tinct. digitalis given internally. 10. The right side has become paralytic, and the left is frequently convulsed. There is a strabismus now upon both eyes. The tumor at the fontanelle continues to increase; she voids urine pretty freely, and has had as many as two or three stools in twenty-four hours. A blister is now applied to the fontanelle. 11. Symptoms and medicines as yesterday. 12. The blister at the fontanelle does not discharge much; it is repeated. The patient has had frequent convulsions; she now lies stupid. The left arm and legs are in a convulsed state, the hand is clenched, and the arm raised towards the head. The leg is drawn up to nearly a right angle with the knee. The right side continues in a paralytic state; the mouth drawn to the right side. 14. Continues to have frequent convulsions, with frequent shriekings; opiates have been continued through whole disease, and appear to mitigate the convulsions. When she winks, the globes of the eye roll to the right. The digitalis appears to produce a considerable flow of urine. 15. All her symptoms appear worse. 16. She died in convulsions.

Dissection. — After death, the brain collapsed, and the tumor at the fontanelle disappeared. On removing the cranium, the dura mater appeared in a natural state. After separating it from the membrane beneath, the blood-vessels, returning the blood from the brain to the different sinuses, were very much distended with coagulated blood. In some of them, the coagulating lymph appeared distinctly separated. In several places between the tunica arachnoides and pia mater, there was a fluid resembling pus, together with a considerable quantity of serum. Upon removing that portion of the cerebrum which covers

the corpus callosum, there appeared a distinct fluctuation in the right ventricle, which was then opened, and there issued from it four or five ounces of serum. In the left ventricle there was not so much serum, but there was a quantity of matter resembling pus rather hardened. The third and fourth ventricles contained some serum; and, indeed, it appeared to be generally diffused throughout the brain, and extended down the spinal marrow. There was an inflammatory crust surrounding the optic nerves, as likewise the left one of the sixth pair.

These were the principal morbid appearances that were discovered upon the brain. Upon comparing these with the foregoing symptoms, we shall discover that the side of the body most affected was opposite to the side of the brain most diseased, and *vice versa*.

Case III.

Of a Diseased Stomach.

Miss R——, aged forty years, had complained for several years of a burning pain, as she expressed it, at her stomach; for which she had made application to several physicians, but had obtained scarcely any mitigation of her complaint. The only temporary relief she could procure was from large draughts of milk and water. She died June 17th, 1808. It was the desire of her friends that the viscera of the abdomen should be examined. On dividing the cellular substance, there escaped a considerable quantity of serum. After the parietes of the abdomen were divided, there was a large quantity discharged, together with some pus. The peritoneum and the peritoneal coat of all the viscera was covered with pus. The lower part of the stomach, the pylorus, and all the duodenum above where the ductus cholideous commu-

nis enters it, were very much enlarged and thickened, assuming the appearance of a cancer. On handling the tumor, it was so ulcerated that the finger readily passed through it, and some ill-conditioned matter issued out. On laying the tumor freely open, it was found to contain some excrementitious substance, together with something resembling the dregs of indigo and flakes of charcoal. The pancreas was very much enlarged, and in a scirrhous state, and adhered to the stomach and duodenum. The liver appeared in a pretty healthy state ; yet the gall bladder was much contracted, and was very firmly attached to the tumor of the stomach, and contained a small quantity of viscid bile. The other viscera were healthy, excepting being covered with pus, as was before mentioned.

APPENDIX E.

The following cases of tracheotomy, with the remarks thereon, were read before the New Hampshire Medical Society, at its annual meeting, 1830. They were subsequently published in the New England Quarterly Journal, vol. i. p. 305: Boston, 1843.

CASES OF TRACHEOTOMY.

In the great variety of operations which the surgeon is called upon to perform, perhaps there is no one more appalling to spectators, or which requires more decision and presence of mind in the operator, than that of bronchotomy or tracheotomy. And when performed for the removal of a foreign substance from the larynx or trachea, there is no case in which the patient receives more immediate and manifest relief, and in which the skill and dexterity of the surgeon are more duly appreciated. Yet the operation itself, if properly performed, is not a dangerous one.

Case I.

August 5, 1827, was called to visit a child aged twenty-two months, and found her with symptoms of suffocation. The report given by her parents was, that, about two

hours before, she had been playing with some common field beans, had put some of them into her mouth, and, in the act of laughing, they supposed one of the beans had slipped into the windpipe. She was immediately seized with a difficulty of breathing, with occasional paroxysms of suffocation. Upon attentive examination, and listening to the manner of her breathing, I came to the conclusion that the bean was in the trachea, near its bifurcation, and probably lodged on or over the left bronchial tube, as the lung on that side of the chest did not expand in respiration.

The necessity of an operation was manifest, and was proposed as the only means of rescuing the child from immediate danger. Her parents would not consent to it; and, as the foreign substance appeared to be fixed or stationary in the situation it then was in, it was thought not proper to urge it at that time. The attendants were directed to watch the child attentively, and, if the bean appeared to come up into the upper part of the trachea or larynx, and strangle her, to endeavor to force it back again by rubbing or pressing the throat with considerable force.

I then left the patient, and was absent two or three hours. Upon my return, I was met at the door by some one saying, "The child was dying." I found her with a livid countenance, tossing herself about in various directions, and gasping for breath. By pressing and rubbing the larynx and trachea, the bean appeared to descend again to its former situation. An operation was no longer objected to, as it was evident she must have immediate relief, or death would be the consequence.

Preparations were soon made. The child was placed upon a table on her back, with a roll of cotton under her neck, and her head bent backward over it, so as to stretch

the integuments on the fore part of the neck, which was very short and fleshy. An incision was made through the skin and cellular substance, extending from near the thyroid cartilage to the sternum, continuing the dissection on the fore part of the trachea. Some small blood-vessels were divided, but the hemorrhage was not so profuse as to delay the operation. The thymus gland, apparently very large, was next observed extending up the trachea till it came in contact with the thyroid gland. It was carefully detached; and the assistants, with some difficulty, succeeded, with small blunt hooks, in holding the two glands asunder sufficiently to denude the trachea, through which an incision was then made, nearly half an inch in length. The air came hissing through the wound. A pair of small forceps were passed into the trachea and up through the glottis, by which it was ascertained that the foreign substance was not above the opening. Then a pair of common dressing forceps were introduced, and the blades separated so as to hold apart the sides of the slit. They were but just placed in that situation, when the bean, during some little struggle of the child, came up, and was instantly seized with the forceps and removed. The patient was turned face downwards to prevent the blood from getting into the trachea. She immediately breathed easy and natural. The glands and integuments closed over the slit, so that no air escaped through it, and within five minutes she was sleeping. After letting her rest for a short time, the wound was sponged clean, and accurately brought together and retained by strips of adhesive plaster; a small compress placed upon each side, and secured by a roller passed several times round the neck. She was then put to bed, and rested quietly through the night. The next day, August 6, when I visited the child, found her running about the house, apparently well.

August 8. — Removed the dressings for the first time. The wound had completely adhered by the first intention, and there had been no febrile action after the operation.

August 12. — The dressings were discontinued, and the child was in perfect health.

Case II.

March 1, 1830. — A child, aged one year and sixteen days, laboring under a slight catarrhal affection or influenza, while creeping upon the floor, put a piece of broken earthen cup into the mouth; and in the act of coughing or laughing, as stated by the parents, it slipped into the throat, and produced, in their language, "a choking, or an inability to swallow, and a difficulty of breathing." Within half an hour after the accident, I saw the child; his breathing was somewhat hoarse and hissing; but his friends said, "Not much more so than before the accident happened." He could not be induced to swallow any thing; but when a little water was put into his mouth, after holding it a short time, he ejected it. A probang was passed into the œsophagus, after which he swallowed readily, and the breathing was less impeded. Some castor oil was administered, and mucilaginous drinks directed.

March 2. — Nine o'clock, A.M. eighteen hours after the accident, the father of the child came running to me, and said he was suffocating; or, to use his expression, "was choking to death." When I arrived, they had the child in their arms, carrying it about the room in nearly an erect posture. He was restless, tossing his arms, and endeavoring frequently to change his position. His countenance was livid, his breathing very much impeded, and sounded hissing and husky, and was only in gasps. It

was evident that the foreign substance was in the larynx or trachea, and that he must be relieved immediately by an operation, or death would ensue. Preparations were quickly made; and, with the assistance of Dr. J. B. Dausman, I proceeded in the operation. The child was placed upon a table on his back, a small pillow rolled hard and placed transversely under his neck, and his head bent back over it so as to elevate his chin and make the integuments tense, and the cartilages of the larynx and trachea prominent.

An incision, two inches in length, was made through the integument. The thyroid and guttural veins were seen, very turgid. They were carefully detached sufficiently to be pushed aside, and were not divided. Continuing the dissection on the fore part of the trachea, an artery, the thyroidea anastomotica, was divided. At first, it bled very freely, so that we were obliged to suspend the operation a few minutes. The bleeding soon ceased; an incision was then made through the trachea, half an inch in length. The air came freely through the wound, and the child breathed with more ease. After delaying a short time, that he might in some measure recover from his exhausted and suffocated state, a small pair of forceps were passed through the slit in the trachea upwards towards the glottis. It immediately came in contact with the piece of earthen cup, and the sound was distinctly heard by the bystanders. Every attempt to seize it with the forceps proved ineffectual. A probe was then curved and passed into the trachea, and endeavors made to dislodge it, but did not succeed; during which the child struggled much, and at length became so much exhausted, that the spectators thought him about expiring. A large probe was then introduced, and with it the foreign substance was pushed up through the glottis into the pha-

rynx, and the child swallowed it. Afterwards a bougie was passed up throgh the larynx and glottis, with which it was ascertained that all obstruction was removed.

In the various attempts made to dislodge this substance, it was pretty well ascertained that it was sharp and angular, and being so firmly fixed that it required considerable force to push it into the pharynx. The probability was that the delicate and sensible membrane, lining the larynx and upper part of the trachea, was very much lacerated and wounded. Under these circumstances, it was thought advisable not to close the wound, that respiration might go on by the air passing through the slit in the trachea, in case that the subsequent inflammation should be so great as to close the glottis, and prevent it passing that way. Some superficial dressings were applied; but a portion of the incision was left open and naked. The child was then put into bed; and, although very much exhausted, his respiration was tolerably free and easy. In the evening he was very quiet, had slept some, and had taken some light nourishment. The air had occasionally passed through the wound.

March 3. — There was considerable febrile action; the breathing was rather more laborious; some portion of the air passed through the incision at almost every breath. A cathartic of castor oil was administered. In the evening, the oil had purged two or three times, and he was resting quietly, breathing as in the morning.

March 4. — The external parts appeared considerably swollen and inflamed. In respiration, the air passed wholly through the incision in the trachea. The glottis was apparently closed by the inflammation, and he could make no vocal sound. Six grains of calomel was to be given, followed with castor oil to purge freely.

March 5. — The cathartic had operated several times;

but the symptoms continued much as they were on the fourth.

March 6. — Suppuration had commenced in the wound, and he breathed at intervals rather laboriously. The air continued to pass wholly through the opening in the trachea. He could neither cry aloud, nor make any noise.

March 7. — Suppuration was copious: he coughed a good deal, and, when coughing, some air was forced through the glottis, carrying with it pus and mucus.

March 8, 9. — He appeared to be failing; took but little nourishment. Suppuration continued very copious, pus very thick and glutinous; and, when any of it was carried with the air through the wound in the trachea, it produced violent fits of coughing and strangulation. At intervals, that is, after he had expelled a good deal of pus and mucus during a paroxysm of coughing, he breathed more freely, and mostly through the glottis; could cry aloud, and articulate some words.

March 10. — His breathing was more laborious, with apparent inability to cough and expectorate. Granulations had sprung up in the wound, and appeared to impede the passage of the air; and, either from inability or disinclination, he had ceased taking any nourishment, and his mouth and jaws were covered with aphthæ, for which a gargle of borax and honey was prescribed.

March 11. — In the morning, a messenger came in great haste, and said "the child was suffocating." I found him breathing very laboriously and croupy. Countenance livid, with the expression of great anxiety; unable to make any sound. Granulations had nearly filled up the wound. The incision in the throat was mostly covered by them, and the trachea itself in that part appeared very much contracted, which was ascertained by passing a probe through the opening; but very

little air appeared to pass into the lungs any way. In this situation, we concluded the indication was, if possible, to dilate the stricture of the trachea, and to clear it of the tenacious, muco-purulent secretion, with which it appeared to be filled. With that view I passed a pretty large-sized urethra bougie into the trachea, and first passed it up through the glottis, and afterwards passed it downwards towards the lungs. It produced considerable coughing, and a good deal of mucus and pus was discharged into the mouth, and either ejected or swallowed, and some came through the wound. This appeared to give immediate relief: it restored his voice, and he breathed with much more ease. A decoction of seneca and squills, prepared after the formula for Coxe's hive-syrup, was directed to be given in doses of a teaspoonful every half-hour, till it produced vomiting, and the gargle of borax and honey to be continued. In the evening, the child had vomited several times, and had two or three alvine discharges: breathed more freely, and took some nourishment.

March 12. — Much improved; respiration was natural and easy; but little air escaped through the wound, and that only when he coughed, cried, or was agitated. He took sufficient food, and the aphthous appearance of the mouth was principally removed.

March 14. — He had gained rapidly. He was sitting up in bed, diverting himself with playthings, and breathed perfectly natural.

March 10. — He had continued to improve. The opening in the trachea was closed, the wound filled up and nearly cicatrized. Discontinued my visits.

April 4. — Called to see my patient; found him in perfect health. The cicatrization of the wound had been complete for several days.

Case III.

March 30, 1830. — Was called to visit S. W. aged four years and four months. Met in consultation with Drs. Carpenter, E. Hatch, and Bliss, at eight o'clock, A.M. The report given by the parents of the child was, that, the evening before, she was amusing herself with some large kidney-shaped garden beans. She had some of them in her mouth, and by some means one of them slipped into the windpipe. She was immediately seized with a difficulty of breathing, which had continued ever since, with occasional violent suffocating attacks. At the time of our consultation, the breathing was hissing and husky; and, by auscultation, we found that the right bronchial tube was obstructed, and concluded that the bean was lodged near the bifurcation of the trachea. An operation was immediately determined upon, as the only means of affording the relief the case so urgently required.

Preparations were soon made, and the child placed upon a table, as in the preceding cases. An incision was made through the integuments two inches in length. The dissection was continued till the fore part of the trachea was laid bare. No blood-vessel of importance was divided, and there was no hemorrhage to impede the operation. A longitudinal incision was then made into the trachea, rather more than half an inch in length. The air passed freely through the wound. The bean soon made its appearance, presenting its broad or flat side to the slit in the trachea, the sides of which would not separate sufficiently to let it pass. Endeavoring to seize it with a pair of forceps, it slipped from my grasp, was forced up, and stuck fast in the larynx or glottis, which it so completely filled, that it prevented any air passing that way. An attempt was made with a large probe to

force the bean up through the glottis; but it was so large it would not pass without too much violence. The child at that time struggled considerably, and the assistants who held apart the sides of the incision lost their hold. The integuments of the neck, which was very fleshy, immediately closed over the opening in the trachea, and stopped respiration entirely. The lungs collapsed, the child straightened herself, her countenance became livid, her eyes motionless and glassy. The spectators declared she was dead. The sides of the incision were instantly separated and held asunder by the assistants, and the blades of a pair of dressing forceps were introduced into the slit in the trachea, and with them the sides were kept apart; but no air passed — respiration did not return — the child was still motionless. I called for a tube or some instrument to inflate the lungs; but the agonized feelings of the friends, and the agitation of the attendants and spectators, prevented their heeding my call, or rendering any assistance. I then seized a bougie which was at hand, passed it through the wound into the trachea downwards towards the lungs, at the same time directed an assistant to press the chest in different directions with his hands. The bougie appeared to irritate and produce some little motion in the chest; and, upon removing it, some little air appeared to rush into the lungs. The motion of the chest increased, respiration was gradually restored, and life and action returned. She swallowed a few drops of camphorated spirit. I then passed a pair of small forceps up towards the glottis, seized the bean, and removed it.

She immediately breathed free and easy. As soon as she had recovered a little from her exhaustion, the wound was sponged clean, and dressed with strips of adhesive plaster; and she was put to bed, and was soon asleep.

The next day, March 31, one o'clock, P.M. there was considerable febrile excitement, with croupy breathing. A cathartic of calomel and jalap was given, and followed by sulphate of magnesia, which purged freely and gave relief. A solution of tartarized antimony was directed to be given occasionally till the febrile symptoms were removed.

April 2. — The wound was dressed, and very little air escaped through the incision. It had principally adhered by the first intention.

April 7. — The incision was entirely healed, and the child in perfect health.

APPENDIX F.

THE PRESENT CONDITION OF THE MEDICAL PROFESSION;

THE IMPEDIMENTS TO ITS PROGRESS AND REPUTATION; WITH SUGGESTIONS ON THE PROPER METHODS TO BE PURSUED FOR THE ARREST OF EMPIRICISM; — AN ADDRESS DELIVERED AT THE ANNUAL MEETING OF THE NEW HAMPSHIRE MEDICAL SOCIETY.

Gentlemen, — Occupied, as I have constantly been, in the practice of our laborious profession, I have found no leisure to digest, and prepare for the present occasion, a regular essay upon any medical topic. But the honorable station in which, by the suffrages of this society, I am placed, imposes upon me the duty of addressing you upon some subject connected with medicine.

Ever anxious to see the character of our common profession elevated to a proper standing, which will exempt it alike from a suspicion of selfishness and from being the butt of ridicule among all classes of society, and placed on an eminence which will command the respect and deserve the confidence of the community at large, I have been induced at this time to occupy your attention, a very few moments, with some reflections upon the present condition of the medical profession, and an inquiry into the causes which hinder its advancement, and what course we

ought to pursue to promote its respectability, and to retard the progress of empiricism, or banish it from amongst us.

Within the last half-century, there has been a very rapid improvement in the science of medicine; under which title I wish to be understood to include, not only the science which is at present so denominated, but likewise surgery, which was formerly the case. Within the period named, there have been great numbers who have engaged in the pursuit, who have brought with them a vast fund of talents, industry, and acquirements, the whole of which they have unremittingly devoted to the subject: in short, almost all those who are now engaged in the profession appear to pursue it with an ardor heretofore unexampled. Medical schools have now become very numerous and respectable, where medicine and its collateral branches are taught and studied in a systematic manner. From these fountains issue annually many young men, not only well informed in the principles of the profession, but possessing talents and industry to pursue it with credit to themselves, and advantage to the public. As a natural result from the causes we have named, the fact is, that the regular profession generally is now much more learned and better qualified to practise than formerly, and are much better entitled to the confidence and patronage of society. But do they obtain it? Are they any more respected now than they were, when their whole stock of medical information was contained in a bundle of recipes? Do we not see the ignorant and itinerant quack still employed to their exclusion? If this is the fact, — and I think no one can doubt it, — how is it that the public are thus imposed upon? and how shall the evil be remedied?

The liability of mankind to imposition, and of becoming the dupes of the cunning and crafty, is in an inverse

proportion to their intelligence and general information. Wherever we find the common mass of people well informed, not only in the objects of their particular pursuit, but upon subjects generally, — that is, they have been from their infancy rationally and philosophically educated, — there we find no impostor fattening upon their credulity; but where we find them generally ignorant, and consequently credulous and superstitious, there we find the hypocritical and fanatical priest, the pettifogging lawyer, and quack doctor.

It is a lamentable fact, that the learned professions have heretofore found it too much for their interest to keep the rest of mankind in ignorance; and, by so doing, they have frequently obtained, not only the good things of this world, but a character for learning, wisdom, and sanctity, to which they were not entitled, either by their talents, integrity, or acquirements.

If we recur to the history of medicine, as handed down to us by its professors, we shall find that the practitioners in the art or science have always been induced to assume some mysterious or supernatural skill, and have studiously endeavored to keep their patients in ignorance, by clothing their prescriptions in a technical garb, and by holding their communications with each other in a language intelligible only to themselves; thus inspiring the uninformed with a belief, that there is something in the profession beyond the comprehension of ordinary minds, and that they have been supernaturally endowed with faculties which enable them to penetrate into and comprehend all the mysteries of nature.

Even in this country, where the principles of all the other arts and sciences are placed within the reach and comprehension of the common people, that of medicine is still, in a great measure, hidden from their view. The

language of medical men and medical writers is not brought to the understanding of mankind generally; it is not the common language of this country, nor of any other country now existing upon earth.

So long and so generally has this method of writing and speaking prevailed among the most learned of the profession, that now, the physician and surgeon, who, in his intercourse with his patients, should use a language perfectly intelligible to them, would be considered by many as very unlearned, and not deserving of their confidence. Is it strange, then, if the regular and learned physician thus keeps himself aloof, and suffers not the common mass of people to approach him and know him, that the crafty quack, destitute alike of information and moral honesty, should frequently palm himself upon the public as one of those duly initiated into all those mysteries which are supposed to belong to the profession?

All this secrecy and mystery in the practice of medicine is an imposition, is quackery, let who will adopt it; and, so long as there is so much of it in the profession, persons of common education cannot discover the difference between the learned quack and the ignorant one. A few years since, a gentleman, after having had an interview with a noted empiric whose fame was then spreading far and wide, observed to me, "Well, I have been to see the Indian doctor." And what do you think of him? "I cannot for my life discover in any thing why he is not as learned and as skilful as any M.D. I ever saw. He converses in a language as unintelligible as the best of you." I considered this a severe and just rebuke upon the profession generally.

There are various ways of playing the quack. As Rush observes, "It is not necessary for this purpose that a man should advertise his skill or his cures, or that he should

mount a phaëton and display his dexterity in operating to an ignorant and gaping multitude. A physician acts the same part in a different way, who assumes the character of a madman or a brute in his manners, or who conceals his fallibility by an affected gravity and taciturnity in his intercourse with his patients.'

There are some who are continually boasting how much more successful they are in their practice than their neighbors, — of the marvellous cures and operations, which, in fact, they have never effected or performed. Others magnify the danger and importance of the most trifling indisposition, or make a great parade about any surgical operation, let it be ever so simple, by calling in a large number of physicians and surgeons to hold a council (as they term it) upon the case; thus unnecessarily alarming the patient and his friends, for no visible purpose, unless it be to secure a retreat from blame if they are unsuccessful, or to enhance their credit should they effect a cure, and enable them to augment the amount of their charge for services.

Some boast of their superior attainments, and of the great opportunities they have had for acquiring medical information. I know a physician, who was never in his life a hundred miles from the place of his nativity; yet he says it must be strange if he does not know more than other practitioners in his neighborhood. He says, and many believe it, that he has obtained all the information that was to be had from the best medical schools in this country, and then he has spent two or three years in Europe. He is intimately acquainted and corresponds with all of the most eminent and learned men in the profession. What they know, he knows; whatever they learn or discover, they immediately communicate to him.

When a patient, upon whom he had been attending a long time, expressed a wish for other advice, he said, "I have written to the greatest doctor in England, and stated your case to him, and he has sent me a medicine which he says never fails in such cases. You had better delay calling other advice, till I have had an opportunity to give it a fair trial." This course had the desired effect: it prevented at that time the consultation, which he dreaded. How much less deception and falsehood was here, than is practised by the ignorant impostor, who boasts of having obtained his skill of the Indians!

There are some physicians, who are very well qualified, who deceive and impose upon their patients by administering inert or useless remedies, and by taxing them for much unnecessary attention. Within the last year, a young gentleman of a fair mind, well educated in the profession, possessing liberal and correct principles, commenced practice in a town in this state. He was called to visit a child in a respectable family: he found it affected with some slight febrile symptoms. He prescribed the remedies he thought indicated; but the anxiety of the parents was such that they were unwilling to trust the young doctor alone, and an older one was called. He came and examined the case, and was informed of the treatment which had been pursued. He inquired, "Did you give the submuriates?" meaning calomel; which name he avoided, lest it should be understood that a portion of mercury had been administered: he was answered in the affirmative. He then took the young physician aside, to hold a consultation, as he termed it. When by themselves, he said to him, "You have treated the case very properly, and have done all the case really requires; but that will not do: you must give more medicine, or you will never never be able to satisfy the people, and obtain

their confidence. In this case, I should advise you to color some water, or a weak solution of nitre, with red sanders, and give the child a teaspoonful once in two or hours, until it recovers its usual health."

A few days afterwards, the young gentleman called upon me, and inquired if such was the course that regular physicians generally pursued, and whether this society tolerated such practice.

The following circumstances were related to me by a respectable clergyman of this State: A farmer, one of his parishioners, had the misfortune to fall from his cart, and one of the wheels passed over him, directly across his abdomen. Although the vehicle was not heavily loaded, yet he was somewhat bruised, and very much frightened. A messenger was despatched with all possible haste for the doctor who resided in the neighborhood, who came with due speed, and, as a thing of course, bled him largely, and administered a dose of castor oil. The doctor was then informed that they had sent for a surgeon, who resided some twenty or thirty miles distant, whose reputation was unrivalled in that part of the country. The next day, the minister was sent for, who, with the neighboring physician, was present when the surgeon arrived. The patient had passed the night with a great deal of anxiety, although with but little pain. The arrival of the great doctor was announced, the family and friends all crowded around the bed of the patient, the surgeon entered the room, with his saddle-bags upon his arm, and turned his eyes directly upon the wounded man. He stood several minutes gazing upon him, during which time his countenance put on the most direful and portentous aspect. At length he shook his head, set down his saddle-bags, and laid off his hat, drew up a chair, and seated himself by the bed, placing one hand upon the abdomen of the patient, and

with the other felt his pulse, and said nothing. Some minutes passed in this manner, when the deathlike silence of the room was interrupted by the anxious and affectionate wife, tears streaming down her cheeks, by "Doctor, what do you think?" A shake of the head was the only reply. The children burst into tears. One little urchin, too young to fully realize what was going on, hearing the sobs of his brothers and sisters, threw down the cat with which he was playing, and ran to his mother for an explanation. Unfortunate for poor puss, the doctor espied him, seized him by the hind legs, and smashed his head upon the hearth, drew forth a knife, and convinced the spectators that he was a dexterous operator, by instantly depriving the cat of her skin, and applying it directly upon the abdomen of the suffering man, again seating himself with one hand upon the wrist, feeling the pulse; in which posture he continued half an hour, and then, for the first time after his arrival, broke silence by inquiring if they had any sheep. Being answered in the affirmative, he requested that a skin might be stripped from one of them, and brought to him immediately; which was accordingly done. The doctor instantly removed the cat-skin, and enveloped the patient in the warm sheep-skin, and continued silently watching him as before. The anxiety of the patient and family was extreme during this farce, which was manifested by the inquiry of "Doctor, what *do* you think? is there no hope?" but not a word could they obtain. After remaining in suspense nearly an hour longer, closely watching the countenance of the doctor, they discovered that the muscles of his face began to relax. At length he smiled, and then broke silence and said, "We have gained it; you are safe! If I had been five minutes later, all the world could not have saved you; the mortification was just beginning."

In the course of a day or two, the farmer was able to pursue his labor as usual, believing that his life was preserved by the great skill of the surgeon.

Numerous other instances might be related, if not equally ridiculous and absurd as those we have named, yet very improper in any gentleman of the profession who wishes to be considered an honorable and honest practitioner.

If such are the impositions and deceptions practised by regular physicians, as they are called, by those who have had the honorable degree of Doctor in Medicine conferred upon them, and are in regular standing in respectable medical societies, it will be in vain for our legislature to enact laws against the ignorant pretender. So long as there are learned and licensed quacks in this country, so long will the ignorant and unlicensed ones obtain patronage from the public.

The most rational, and I presume the only successful, method, for us to combat quackery, will be, in the first place, to avoid it ourselves; and then endeavor to enlighten the common people as much as possible. Let them understand that the principles of the profession are founded upon reason and science, and that we are governed by those principles. We make no pretensions to supernatural powers. Let us banish all technical phraseology from our conversation and prescriptions, if not from our pharmacopœias. Let us be unwearied in our efforts to investigate the nature and causes of disease, and the effects of remedies. When called to the bed of sickness, let us be very critical in our inquiries and examinations, and patiently investigate every circumstance relating to the case; and, after having formed an opinion, let us be candid in stating our views of the case to the patient or his friends, explain to them, if possible, the location

and nature of the disease, the indications of cure which are to be pursued, and the remedies we intend to prescribe, with the effect we expect they will produce. If we have any doubt in the case, or think we do not rightly understand it, let us acknowledge it, and call for advice, if thought necessary.

By pursuing this course, we shall soon enlighten the common mass of people, so that they will in a measure comprehend the general principles of the profession; and thus we shall obtain their confidence, and quackery and quacks will soon be banished from amongst us, without the aid of legislative enactments.

APPENDIX G.

This affidavit, relative to fracture of the femur, was found among Dr. Twitchell's manuscripts. Its date is unknown.

FRACTURE OF THE THIGH-BONE, AND THE LIABILITY TO A SUBSEQUENT DEFORMITY OF THE LIMB.

I, Amos Twitchell, of lawful age, do testify and say, that I have ever considered a fracture of the thigh-bone attended with a great risk of deformity, in the hands of even the best of surgeons. I have been uniformly of opinion, that, let the reduction and first dressing be ever so skilfully performed, it would be of little importance, unless the subsequent management was judicious, and adapted to the circumstances as they occur from time to time, ever maintaining an inflexible command over the patient; restraining and directing him in all his motions. Believing this, I have sometimes refused to visit a patient for the purpose of reducing a broken thigh, who lived at the distance of twenty or thirty miles; thinking that my services would benefit him but little, as I could not control the subsequent treatment, and knowing that all deformity which might occur in the limb would probably be unjustly attributed by the ignorant to the surgeon who first dressed it. This was the case with a

person with whom I am acquainted, whose thigh was broken. Dr. Nathan Smith, being in the neighborhood, was called: he reduced and dressed the limb. Afterwards, owing to the restlessness of the patient, it was displaced, and was never attempted to be righted by the attending surgeon. The consequence was, the man was a cripple, and Dr. Smith received the opprobrium of many. In cases which have fallen under my care, I have considered that I have done but little towards securing to the patient a good limb, by reducing and dressing it in the best possible manner; but I consider that it must be carefully and perseveringly managed both by surgeon and nurses for the space of thirty or forty days, inspecting frequently the situation of body and limb of the patient; altering position of one or both, whenever their appearance should indicate; bearing in mind, when we compare the broken with the sound limb, that there is a possibility of our being deceived in the length of the thigh by the position of the body. If I succeed in keeping the limb perfectly in place the first fifteen or twenty days, I consider the risk of after-displacement but small, with a common share of prudence; but, on the contrary, if there is frequent movement of the fractured bone during this period, the confinement must be much longer and more rigid; and, even then, there will be a greater liability to deformity. Whenever I find the least displacement, which is frequently the case, I immediately endeavor to remedy it, either by altering the position of the limb, or by the application of compresses and splints, or by extension, as the case may require. In one case, the third week after the accident, the union of the fragments having commenced, I left my patient for a few days, when I returned and found a very considerable curvature of the thigh laterally and outwardly, which I succeeded in re-

moving completely in a few days, without any extension, merely by the proper application of compresses, splints, and bandages. The time necessary for a perfect consolidation of a broken bone is very different in different subjects, under the various circumstances of age, health, and the injury received. Owing to this, there is sometimes an unexpected shortening of the limb after the fragments have been retained in place the usual time necessary for a complete union, and the patient then prematurely begins to use his legs. Taking the foregoing view of the subject, in my opinion it must appear evident to every well-informed person, how unreasonable it is that a surgeon who first dresses a broken thigh, and has afterwards no special care, should be considered accountable for every deformity which may take place.

APPENDIX H.

Like the preceding paper, the following was found among Dr. Twitchell's manuscripts. Its date is unknown; but it is evidently the rough draft of an answer to a Committee who had consulted him on the subject of Temperance.

EFFECTS OF ARDENT SPIRITS ON THE HUMAN SYSTEM.

To say what proportion of our diseases are produced by ardent spirits would be impossible; for, in many instances, the remote cause of disease is hidden from our sight. But all who have paid any attention to the subject will agree with me in saying, that the effect upon the human constitution, even when they are used only in what is called a temperate manner, is to dispose to almost every form of acute disease; and there is scarcely any form of chronic disease which has not at times been excited by the habitual use of ardent spirits. Persons who are predisposed to diseases from other causes frequently excite them by the use of ardent spirits; whereas by a total abstinence they might escape. This predisposition to disease is sometimes inherited from intemperate parents.

To point out the various ways in which ardent spirits produce disease cannot be expected of me at this time. But, from the attention I have paid to the subject, in

watching their effects upon the human system, and investigating the remote and proximate causes of disease, I have come to the conclusion, that more than one-half of all the disease amongst us, especially in adults, is in one way or another produced by their use.

You inquire in what degree ardent spirits are useful in preserving health, or in curing disease. They are not absolutely necessary in either case. I am aware that the celebrated Rush points out two cases in which spirits may be administered with safety and advantage: 1. When the body has been suddenly exhausted of its strength, and a disposition to faintness is perceived; 2. When the body has been exposed for a long time to wet weather, more especially if combined with cold. These are the only two cases in which he allows distilled spirits to be useful to persons in health. In the first of which, water of ammonia or sulphuric ether will answer every purpose; and, in the latter, a cup of warm tea or coffee, and at the same time rubbing the surface with a warm flannel, or with tepid water in which is dissolved a little salt would be far preferable.

In curing diseases, ardent spirits are entirely unnecessary.

It is the vulgar opinion, that the use of spirits is beneficial in preventing contagion. But every medical practitioner of any observation will bear testimony against this error. I am fully convinced from observing facts, that nurses and other attendants upon sick, who totally abstain from drinking alcoholic liquors, are not so liable to contract disease as those who are in the habitual use of them.

The Committee will excuse this hasty and imperfect reply to their inquiries, when they reflect that my time and attention are constantly taken up by my professional duties.

APPENDIX I.

The following very interesting case, which occurred under the care of Dr. Twitchell, was published by his nephew, Dr. Bemis, of Medford, in the "Boston Medical and Surgical Journal," vol. xviii. p. 120. Dr. Bemis was, at the date of publication, one of Dr. Twitchell's students. The case is referred to on page 139 of Memoir.

CARCINOMATOUS SARCOMA IN THE MUSCLES OF THE ARM.

21st February, 1838. — I. P. a man of twenty-two years of age, presented himself with a disease of the left arm. He says that, about three years since, in lifting a heavy weight, he sprained the shoulder-joint of this arm severely; and, a day or two afterwards, he was exposed to cold and wet, which, he thinks, had some effect in aggravating the injury. The functions of the joint remained somewhat impaired for about two months after this accident; at the expiration of which time, he perceived several hard gristly prominences on the arm, near the insertion of the deltoid muscle. These gradually increased, and subsequently coalesced; so that a hard, gristly ridge completely encircled the arm at this part. The swelling gradually extended upwards and downwards; so that ultimately the whole upper arm, and portions of the muscles over the scapula, and of the pectoralis major, became im-

plicated in the disease. The arm is nearly three times larger than the other. The glands in the axilla are a little larger and harder than is natural. The swelling is hard and firm; it does not give the irregular, scaly feeling of osteo-sarcoma, but seems to be fibro-cartilaginous, rather than bony. The superficial veins over the diseased parts are much enlarged. The disease has been almost unremittingly attended with sharp, lancinating pain, extending downwards to the elbow joint, and upwards to the neck and back of the head; and the patient has been at times troubled with very severe headache, which he referred to the back of the head.

The patient has employed a variety of remedies, by the advice of different professional gentlemen. The arm has been freely leeched and cupped. He has taken largely of iodine, in the form of potass. hydriod.; an issue was kept open, for two or three months, on the lower part of the upper arm, the discharge from which was copious, consisting of thin, sanious pus. In short, all the remedies usual in such cases have been unavailingly exhibited, not even mitigating the pain. He is, of course, much emaciated and weakened; but his general health seems to be pretty good. The functions of the digestive organs are unimpaired; he has no cough; and auscultation gives the healthy sound. He is very desirous that an operation should be performed; and, as it is thought the removal of the diseased parts will afford him some chance of at least temporary benefit, the operation of removing the arm, together with the scapula and a part of the clavicle, has been decided upon.

24th February. — The operation was performed to-day, at ten o'clock. The axilla having been shaved, an incision was made through the integuments, commencing near the inferior point of the scapula, extending upwards and

forwards, and passing about two and a half inches in front of the coracoid process; another incision, commencing over the middle of the clavicle, was carried downwards and forwards to meet the first. The integuments were then dissected up from over the clavicle: this bone was sawed through, with Hey's saw, at about its middle, and disarticulated from the scapula. The subclavian artery, which had been compressed on the first rib, was easily secured. The integuments were next dissected up from over the scapula; that bone was removed from its attachment on the under side; and the sub-scapular artery, and two small branches which required the ligature, were secured. The operation was concluded by forming a small portion of flap from the axilla. The whole operation occupied twenty-five minutes; part of this time was lost on account of the fainting of the patient. Not more than half a pint of blood was lost.

On dissection, it was found that the muscles of the upper arm, with the exception of a small part of the biceps flexor cubiti, were entirely converted into a hard, fibro-cartilaginous mass, through which irregular striated lines passed in different directions. The inter-muscular fascia seemed to have resisted the disease longest: it could be distinctly made out in many places. The brachial artery was unobstructed; but its coats were converted into something very like cartilage. The articular cartilages of the shoulder and elbow joints were partially absorbed. On the outer side of the fore arm, two or three small indurated spots were observed; which, when cut into, were found to correspond in appearance to the disease on the upper arm. The os brachii was of the natural size, but very rough and fragile; it was accidentally broken at the neck, during dissection, by the fingers. The disease was undoubtedly carcinomatous sarcoma.

The patient supported the operation very well. Immediately on its conclusion, he was put to bed, and tinct. opii. gtts. 70, were directed.

4 o'clock, P.M. — The patient, considering the circumstances, is comfortable. Re-action has come on moderately. Breathing regular. Pulse 82, full. He is somewhat incommoded by spasmodic twitching in the wound. An opiate was ordered at bedtime.

The dressings were removed seventy-two hours after the operation. Union by the first intention had taken place. There was no suppuration, except what was caused by the ulceration around the stitches. The ligature on the subclavian came away on the nineteenth day. Some portions of the cut surface around the ligature, which were not united by the first intention, healed kindly by granulation. The patient recovered his strength very rapidly, sitting up most of the time, and walking out daily, after the removal of the ligature.*

* This patient died, about two years after the operation, of carcinoma of an internal organ.

APPENDIX J.

THE account of this case may be found in the "Boston Medical and Surgical Journal," vol. xviii. p. 169. It is republished as originally communicated by Dr. Bemis.

LITHOTOMY. — OPERATION ON A FEMALE.

A S. a deaf and dumb married woman, æt. thirty-three years, presented herself on the 7th February, 1838, for admission into the private hospital of my medical instructor, Dr. Twitchell. On examination, this patient was found to present the ordinary symptoms of urinary calculus; and, on the introduction of the sound, a stone was distinctly felt. The urethra was exquisitely tender, the introduction of a common-sized catheter causing great pain; and an application was made of an ointment containing ext. belladonnæ and plumb. acet. with the view of diminishing this morbid sensibility. The usual attempt to extract the stone by dilating the urethra was made; but, on account of its large size and the tenderness of the urethra, its removal, by this means, was not effected; and the operation of lithotomy was decided upon.

The operation was performed on the 13th February. The patient having been placed on the table, and bound in the usual manner, the bladder being full, a sound was introduced, and the position of the stone ascertained. It occupied the same place as when first sounded, and was not movable. The sound was then withdrawn, and a grooved staff introduced in its place. Two fingers of the

left hand of the operator being in the vagina to protect that from injury, the beak of the gorget was introduced into the groove, and pushed along through the whole course of the urethra, dividing it laterally. The staff and gorget having been withdrawn, a small pair of forceps was introduced; and the stone was readily found and grasped, and easily extracted, though it was slightly adherent to the bladder. The hemorrhage was trifling.

The patient was put to bed, and an opiate was directed. No dressings or stitches were made; but she was kept on the back, with the thighs drawn together. On the third day after the operation, an examination was made by introducing a catheter into the urethra, and the fingers into the vagina; and it was found that there was a perfect union. The patient amended rapidly; and on the 26th February went home, perfectly well, except that, on account of irritability of the coats of the bladder, she was unable to contain so large a quantity of urine as is usual.

I take the liberty to send you this account, not as being that of a very unusual or remarkable case, but from having noticed a report of a similar operation in the 7th No. of vol. xviii. of your Journal; in commenting upon which, the writer reprobates very strongly the method of operating pursued, ridiculing the idea that the urethra can unite under the circumstances, and asking if "the dividing the urethra does not perfectly destroy all chance of recovery." In this case, at least, it did not. Many surgical writers on lithotomy say nothing of the operation on the female; but, in answer to the inquiry, "Is there any authority, to say nothing about common sense, in the matter?" I would refer him to Desault's Surgery, to Mr. Benjamin Bell's System of Surgery, and to Sir Astley Cooper's Lectures as reported by Mr. Travers; — authorities which no one will probably feel inclined to question.

APPENDIX L.

In the Memoir, page 101, I have alluded to Dr. Twitchell's views on the effects of tobacco upon the human system. The following is an abstract of a lecture delivered by him: * —

EFFECTS OF TOBACCO ON THE HUMAN SYSTEM.

At the meeting of the Western District New Hampshire Medical Society, at the Temperance House in Keene, May 5, 1842, Dr. Twitchell, having been appointed to address the meeting, selected for his subject the habitual use of tobacco, and its effects on the constitution.

In discussing this subject, the doctor first described the effects it has on the nervous system, particularly the nerves of involuntary motion, — those whose function it is to carry on the action of the lungs, heart, and stomach. These nerves are placed beyond the power of the will, acting without our consciousness, in sleep as well as when awake. And it is on these, he said, the habitual use of tobacco produces its most pernicious effects, by paralyzing their action.

It first manifests itself in the respiration, which is imperfectly performed; the blood is not fully purified, and a sense of anxiety or incipient suffocation is felt; to re-

* Lectures to Young Men on their Moral Dangers and Duties, by Abiel Abbot Livermore. Boston: James Munroe and Co. 1847.

lieve which, a voluntary effort is made to expand the chest to take in more air; and, every now and then, a deep inspiration or sigh is the result, giving momentary relief.

But, during sleep, especially when first going to sleep, the will not being so easily excited to action, the sense of suffocation is longer endured, till, at length, becoming urgent and painful, a degree of consciousness is awakened, the individual begins to feel his condition, and rouses, perhaps suddenly starts, and sits up in the bed in alarm, his heart palpitating violently; and, having obtained relief, soon goes to sleep, to pass through the same scenes again.

But, as the habit continues, the whole nervous system becomes affected, — the muscles become tremulous, the sensibilities diminish, respiration and the action of the heart become more imperfect, and suffocation more urgent: but consciousness now fails to be roused to put forth a voluntary effort for relief; and the poor abused and languishing nerves, whose office it is to stand sentinel at the fountains of life, obtaining no help from the muscles of volition, at last are compelled quietly to yield up the struggle; and the person is found dead in his bed, the cause not known. Yet it is a foolish sacrifice of life to the vile but enchanting habit of using tobacco.

There are doubtless some few who are found dead from disease of the heart. But the doctor said he had for many years been extending his inquiries on this subject; that he had found almost every individual, who had died during sleep, had long been in the habit of the free use of tobacco, and it was his full conviction that that was almost the only cause of such deaths.

The habitual use of tobacco, he said, was a most fruitful source of disease. And this would appear evident when we consider its effects upon the nervous system. It lowers down the power of those nerves upon which life

depends; the blood does not fully undergo that change in the lungs which respiration is designed to effect, and goes to the heart impure and purple; the heart has not its original power to send it forward in its circulation through the body; and an impure, sluggish circulation is the consequence, which predisposes to almost every disease the human system is subject to.

Among the diseases caused by tobacco, the doctor enumerated palsy, inveterate nervous headache, palpitation of the heart, disease of the liver, indigestion, ulceration of the stomach, piles, and many others; and finally, he said, he hardly knew that there was any disease it did not at times produce. He did not undertake to assert, that all who use tobacco must necessarily have these diseases fully developed. But he said individuals often experienced annoying, and sometimes alarming symptoms, the result of tobacco, which render them infirm and wretched, while they are altogether ignorant of the cause. He mentioned giddiness, pain in the head, palpitation of the heart, faintness, and gnawing sensation of the stomach, neuralgic pains, trembling, sudden loss of strength, loss of recollection, starting in sleep, &c.; that he had been called to prescribe for a great many persons, whose diseases have spontaneously disappeared on their discontinuance of tobacco.

The particular form in which tobacco is used is not of very material consequence. He thought tobacco more frequently produces palsy than all other causes, and that snuff is more likely to bring it on than any other form in which it is used; but that chewing is more injurious to the digestive organs, affecting them in a threefold way. It robs the stomach of its saliva, lessens its nervous power, and diminishes its peristaltic motion; and all the cases he had seen of ulceration of the stomach were manifestly the effects of tobacco.

APPENDIX M.

The following paper was prepared by the author of the Memoir, and is the result of investigations made by members of the Boston Society for Medical Observation. The subject seems appropriate, because the investigation was undertaken in consequence of a conversation held with Dr. Twitchell upon the symptoms attending the use of tobacco. See Memoir, p. 101, and Appendix L.

OBSERVATIONS ON THE EFFECTS OF TOBACCO ON THE HUMAN SYSTEM.

In 1848, it was proposed to the Boston Society for Medical Observation to investigate some of the points suggested by Dr. Twitchell, particularly with reference to the dyspnœa and disposition to sigh, and to have nightmare, evinced by those in the habitual use of tobacco. In one hundred and eighty-five cases, questions were made; and the results, though in some respects imperfect, rather confirm the views of Dr. Twitchell. It appeared from these investigations, that some may continue the use of tobacco, in a *moderate* way, for many years, without any apparent symptoms; but, if disposed to use it more freely, they will be very liable to various functional diseases. The following table illustrates this assertion: —

	Among those having symptoms.	Among those not having symptoms.
Average time tobacco was used . . .	15 yrs.	13 1-3 yrs.
„ amount of cigars daily . . .	4 2-5 cig.	2 1-4 cig.
„ amt. of tobacco chewed per mo. .	16 2-3 oz.	13 13-15 oz.

Dyspnœa, taking the word in its most general sense, was as liable to occur in those who had not used tobacco, as in those who had indulged in that habit. But it was trifling in character, and scarcely noticed in the former; while, at times, it was very severe in the latter class.

A disposition to sigh or gape frequently was noticed in both classes of persons; but it was much more manifest in the tobacco-chewers than in others. One said, he sighed voluntarily to "fill his chest." In two, the habit and need wholly disappeared, when, under the advice of physicians, they abstained from the use of tobacco.

Night-mare, usually in the early part of the night, was at times a most horrible accompaniment of an inordinate use of tobacco, although, of course, it is a symptom liable to occur in any class of patients.

The following exceedingly interesting case occurred in my own practice: A large, gross, sallow-looking man, with congested eyes, and having all the aspect of a *bon vivant* in a coarse way, consulted me for what he supposed to be disease of the lungs or heart. His chief complaints were some palpitation and a pain, with soreness of the breast. He attributed these symptoms to a strain received many years ago. He had always led an active life, and all his functions seemed healthy. Upon auscultation of the chest, the thoracic organs were found to be normal. It appeared, however, first, that he had used on an average twelve cigars daily for the five previous years, having been, moreover, an inveterate smoker for some time before that period. He had not chewed or taken snuff. The description he gave of his "horrible" nightmare, as he

expressed himself, was as follows: "Soon after going to sleep, I suddenly awake to a consciousness of intense difficulty of breathing, and a sensation as of approaching suffocation. I feel, however, unable to free myself. I cannot move, although sensible that, if any one will violently shake me, the spell will be broken. It hurts me to attempt to move. Under these circumstances, I begin to groan aloud, and endeavor to make as many signs of distress as I can in order to arouse my friends. While I was married, my wife usually shook me, and after a time the fit went off." Unfortunately, the worthy gentleman became a widower; and then, continued he, "I made an arrangement for my sister to sleep in the adjacent room, with a door open between the apartments, in order that she might do me the same favor that my wife had performed. In fact, I really believe that I was induced to marry a second time, much more on this account than any other! On one occasion, before my second marriage, I think I was very near dying. My sister was a long while before coming to my aid; and I was so exhausted by my efforts at groaning, that, when she entered the room, I ceased making any exertion. You may imagine my horror at seeing her turn to leave, thinking that the fit was over. I began again with great difficulty to show my usual signs of distress, and I did not and could not arouse myself until the accustomed shaking had been undergone." He told me that he had frequently felt his pulse, when recovering from these fits of nightmare, and had found it fluttering. These accesses were almost sure to happen, if he indulged in any excitement. I advised him wholly to throw aside the use of tobacco. Being a resolute man, he followed my advice; and for three months he abstained wholly, with entire relief to his symptoms about the chest, and to his nightmare. At the end of that period, he had

a slight paralysis of the arm, with a short fit of unconsciousness. By the advice of another physician, he resumed in *moderation*, about one or two cigars daily; and, at the time I saw him last, he had not experienced any return of the difficulty.

In regard to the various symptoms of indigestion, I have no doubt, from our investigations, that they are liable to occur from the use of tobacco. These symptoms are often produced by a slight use of the narcotic; but, of course, they are worse in those persons who use it inordinately.

The following very interesting case was related to me by Dr. Buckingham, of this city: The patient was an old woman, who had been for years an inveterate smoker. After smoking much of the day, she could not sleep without lighting her pipe two or three times during the night. For two years before Dr. Buckingham saw her, she had not walked two rods from her own door-step, and always used a staff for her support. She had had constant pain in the occiput, and cramp in the legs, with obstinate constipation, the bowels never operating unless stimulated by the most drastic purges. In July, 1848, she had cholera morbus, and was treated with opium and recovered. Since that period, she has used no tobacco. She can now walk a mile without a cane, is free from headache and constipation, having not used a cathartic since her illness.

In six cases, palpitations were produced; and in eight, pains in chest usually over the heart, but at times at the right side of the breast. In two of these it was noticed particularly after immoderate use of tobacco.

Headache was observed four times, and frightful and severe dreams in four more cases. Nervous tremors, cramps, starting, &c. were found eleven times. In one case the memory was benumbed, and the patient became stupid.

The following was told to me as the personal experience of a very sagacious medical man: "For five years I had been accustomed to chew one cubic inch of tobacco daily. From April, 1847, to April, 1848, I had been liable to attacks of severe headache, of an entirely local character, usually over one or the other parietal bone. It seemed as if an instrument were boring into my skull, and caused intense suffering. With this were slight nausea and diarrhœa, commonly in the morning before the pain began. This last began at nine, A.M. and continued till sundown. At first, these attacks were but seldom; but, by the middle of April, they recurred three times a week, wholly unfitting me for all mental or physical labor. My father (a physician) at length persuaded me to give up the use of tobacco. For three weeks I gained no relief, either in the frequency or severity of the attacks. Then they became less severe and gradually less frequent, so that, by July 1, I was wholly rid of all trouble, save a slight occasional headache, to which I was always subject from early life." The above, besides being a very interesting example of the effects of tobacco, illustrates their gradual growth, and their almost equally gradual disappearance.

From the above remarks and facts, it seems evident that Dr. Twitchell has not exaggerated, when saying that symptoms connected with the cephalic, thoracic, or abdominal organs may arise in tobacco-chewers. From a review of all these investigations, I infer, first, that, though under "moderate" use of tobacco some may escape, they are by no means certain of doing so; second, that habitual, inordinate chewers or smokers will almost inevitably suffer more or less, and in some instances they will have to undergo an amount of torture to which it seems almost impossible to believe that any man would voluntarily subject himself, merely for the sake of gratifying a beastly appetite.

APPENDIX N.

LIST OF DIPLOMAS, &c. HELD BY DR. TWITCHELL.

The following is the list of Dr. Twitchell's diplomas, and certificates of membership of various societies : —

Degree of Bachelor of Arts, 1802.
„ Master of Arts, 1805.
„ Bachelor of Medicine, 1805.
New Hampshire Medical Society, 1811.
Overseer of Dartmouth College, 1816.
Dartmouth Medical Society, 1819.
Massachusetts Medical Society, Honorary Member, 1838.
Trusteeships of the New Hampshire Insane Asylum, 1840, &c.
National Institution for the Advancement of the Sciences, Washington, 1841.
Northern Academy of Arts and Sciences, Hanover, 1841.
Philadelphia College of Physicians, Honorary Member, 1843.
New Hampshire Historical Society.
American Medical Association.

THE END.

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